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UNIVERSITY OF ALBERTA

Irrational Beliefs and Parenting Stress

by

Kathleen A. Ackerman

(C)

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

AND RESEARCH IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS OF THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

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DEDICATION

This thesis is dedicated to my mother

Helen Kathleen Ackerman

who has supported me through

all of my life experiences.

Abstract

The purposes of this project were to develop an instrument to measure parent irrational beliefs and to explore the relationship between irrational ideation of parents and parenting stress. The Parent Irrational Belief Scale (PIBS), a measure of general irrational beliefs (Shorkey & Whiteman, 1977), two measures of parent sense of efficacy (Gibaud-Wallston, 1977; Rotter, 1966) and a measure of parenting stress (Abidin, 1983) were administered to 129 women with children under the age of three. A moderately high degree of relationship to the general irrational belief scale ($r = .69$) and low degree of relationship to the measures of parent sense of efficacy (.11 and .10) indicate the PIBS possesses acceptable convergent and discriminant validity. The PIBS was found to have a Cronbach's alpha reliability of .85 and principal component analysis yielded six factors. A significant relationship was found between the PIBS and parenting stress ($r = -.47$). The beliefs that mothers must always be loving in order to gain the approval of their children and that parents must always be loved by their children were identified as being prevalent irrational beliefs in the sample.

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Chapter 1

Introduction

Introduction to the Problem

The transition to parenthood and children's early childhood years have been identified as particularly stressful periods for parents (Abidin, 1983; Cutrona, 1984; Gibaud-Wallston & Wandersman, 1978; Hobbs & Cole, 1976) and for mothers in particular (Cowan & Cowan, 1988; Weinberg & Richardson, 1981). New mothers are faced with the primary tasks of childcare and nurturance as well as having to reorganize basic life structures to accommodate the new baby, meet basic survival needs, and maintain social relations with husband and friends.

Research indicates that maternal stress is significantly related to child abuse (Bauer & Twentyman, 1985) and hyperactivity (Mash & Johnston, 1983) and reports of maternal stress outweigh the contribution of any other variable in predicting child behavior disturbance (Sandberg, Weisleberg & Schaffer, 1980). Balkwell and Halverson (1980) found that elevated stress levels lead to maternal distress, less rewarding parent-child interactions, the use of more severe discipline methods, and a negative view of parenthood. Abidin (1983) states that stress in the parenting system during the first three years of life is especially critical in relation to the child's emotional and behavioral development and to the parent-child relationship. These findings indicate that there is potential clinical

relevance for a more complete understanding of stress in the early parenting experience.

Early studies of stress tended to focus on stress either as a set of external forces impinging on the individual or as the individual's response to external threatening events. Lazarus and associates focusing on individual variability in response to stress events, contend that the critical variable in stress is the cognitive appraisal of an event rather than the event itself (Holroyd & Lazarus, 1982; Lazarus & Folkman, 1984; Lazarus & Launier, 1987). Muldary (1983) contends that perceptions and appraisals of situations are principal determinants of one's experience of stress and thus irrational beliefs upon which appraisals are made may significantly impair the accuracy of judgements and influence the experience of stress. He further notes that various distressing emotions and behaviors are mediated by unrealistic expectations of oneself and others. Managing stress requires individuals to restructure irrational beliefs and expectations in order to change habitual maladaptive ways of thinking and of perceiving the world. If individuals have unrealistic expectations concerning performance on certain tasks and believe that they must be perfect at what they do, then they are likely to experience stress when their expectations are not met. Muldary (1983) suggests that if individuals moderate their beliefs to a more rational view such as "I

would like to do well and I'll do my best, but the world won't end if I'm not perfect", then they will experience less stress.

Ellis'(1963) concept of irrational ideation has drawn a great deal of attention within the area of cognitive psychology. According to Ellis (1963), beliefs, cognitions, and ideas exert important, direct and strong influences on thoughts, feelings, and behaviors, and consequently affect the degree of an individual's emotional disturbance. Realistic, or rational, beliefs lead to appropriate feelings of sadness, displeasur,e and frustration when expectations and hopes of fulfilling goals are not met. Unrealistic, or irrational, beliefs lead to inappropriate feelings of anxiety, depression, worthlessness, rage and self-pity. Ellis (1987) contends that virtually all people are born with strong tendencies to think irrationally about their important desires and preferences and to escalate them into dogmatic, absolutist shoulds, oughts, musts, demands, and commands. He further proposes that this type of absolutistic, irrational thinking is the basis for poor mental health.

Parenting in the early childhood years has been identified as a particularly stressful time for parents. Current literature on stress and irrational beliefs indicates that our beliefs and appraisals about situations influence our experience of stress. Extrapolating from

this, it may be that many parents possess a set of irrational beliefs concerning their parental roles that consciously or unconsciously influence their appraisals of situations, and subsequently influence their experience of stress. Identifying irrational beliefs concerning parental roles and establishing their relationship to stress may have practical relevance for the treatment of stress in parents of young children. Stress levels and irrational ideation may also be influenced by other factors such as maternal age, marital status, employment status, income level, education level, number of children, and degree of perceived spousal involvement. These variables will also be explored for their role in mediating maternal stress and whether or not there are differences in levels of irrational ideation between women differing on the aformentioned variables.

Clinically, maladaptive ways of thinking have been found to be amenable to therapeutic intervention (Ellis & Whitely, 1979; O'Leary, 1984) and are important not just for their significance in explaining maladaptive behavior but also as an area for potential therapeutic change. The identification of irrational beliefs which relate highly to stress levels has significance for the future development of counselling-educational treatment programs aimed at reducing dysfunctional idealistic beliefs. Scales specific to parenting will enable therapists to quickly identify pertinent beliefs which may then be the focus of therapeutic

intervention. It will be theoretically significant to determine the degree to which parent irrational beliefs relate to parent stress.

Nature of the Problem

Considerable research has substantiated the existence of irrational beliefs in persons who do not seem to cope well with their environments (Bard, 1973; DiGuiseppe & Kassinove, 1976; DiZurilla, Wilson & Nelson, 1973; Goldfried, Decenteceo & Weinberg, 1974; Goldfried & Sobocinski, 1975; Schill, Adams & Ramanaiah, 1982), and Ellis' concept of irrational beliefs has been related to generalized stress and anxiety, and their effects on behavior. To date, however, the concept of irrational beliefs has not been related to parental stress in particular. To do so effectively would require the development of tests that would be sensitive to these factors in the context of child rearing.

Research on existing general irrational belief scales (Smith & Zurawski, 1983; Watson & Clark, 1984; Zurawski & Smith, 1987) indicates that general scales are lacking in discriminant validity such that they correlate as highly with various measures of distress as they do with second measures of irrational beliefs. Smith and Allred (1986) suggest that poor discriminant validity may be due to affective contamination of the scales such that they are tapping general distress rather than cognitions. They

propose that one avenue of improving discriminant validity involves the assessment of beliefs in a limited domain of functioning such that items assess specific beliefs rather than the emotions that these beliefs are hypothesized to arouse. For example, Eidelson and Epstein (1982) developed a measure of beliefs about relationships that is moderately correlated with marital satisfaction. In another study Thurman (1985) developed a measure of irrational beliefs which apparently underlies the hard driving, competitive Type A style. By focusing on specific beliefs, Smith and Allred (1986) maintain that such new scales may be able to avoid affective item content and the associated problem of discriminant validity. It is hoped that an irrational belief scale specific to parenting will have more discriminative validity than existing general scales. The primary purpose of this study is to develop and evaluate a scale to measure parent irrational beliefs, which is relatively short, easy to administer and score, and useful in a clinical setting.

Scale development.

For an irrational belief scale specific to parenting to be of clinical use, a number of things must be done. The test must be shown to be a valid measure such that it actually measures what it claims to measure. To do this it must be shown that the test possesses acceptable content and construct validity. Content validation involves the

systematic examination of the test content in order to determine whether it covers a representative sample of the behavior domain to be measured (Anastasi, 1982). Development of individual test items should be based on theory and a review of the relevant literature and then piloted on a small sample to assess face validity (ease of understanding, readability of items, and effects of item format). To provide content validity, the PIBS will be based on Ellis' (1963) eleven basic irrational beliefs and a review of the literature related to the development of irrational belief scales. A pool of statements pertaining specifically to parenting will be developed and, based on a review for relevance of content and adequacy of construction, three statements for each of Ellis' irrational beliefs will be chosen. The 33 item scale will be tested on a small sample to assess face validity and then piloted on a larger sample. The scale will be analyzed for internal consistency using discriminative item analysis and revised by eliminating the item from each group of three with the lowest corrected item-total correlation. A Cronbach's alpha of .85 or greater will be considered acceptable.

Self-report inventories can be subject to the problem of response biases or response sets. Anastasi (p. 520, 1982) states that "Despite introductory statements to the contrary, most items on such inventories have one answer that is recognized as more socially desirable or acceptable

than the others." One method of addressing the problem of social desirability is to build in "subtle", or socially neutral items. However, since the PIBS is designed to measure a particular cognitve set, that of irrational ideation, it was felt that adding neutral items would detract from the usefulness of the scale in identifying this particular type of thinking. Another way of attempting to deal with the problem of social desirability is to establish rapport with examinees in order to motivate them to respond frankly. Since the PIBS is to be used in a clinical setting, it would be expected that the clinician, or therapist, establish a good working relationship before administering the PIBS in order to encourage honest responding. Clear instructions at the time of administration can also help to alleviate the problem of response sets.

Another type of response set is that of "aquiescence", or the tendency to answer either positively or negatively to all items. In order to address this problem, items for the PIBS will be selected and worded such that there is a mixture of items in which a "strong agreement" response is keyed positively and a "strong disagreement" response is keyed positively.

The construct validity of a test is "the extent to which the test may be said to measure a theoretical construct or trait" (Anastasi, p.144, 1982). It may involve

the gradual accumulation of information from a variety of sources over time. It must be shown that a test correlates highly with other variables with which it should theoretically correlate (convergent validity) and that it does not correlate significantly with variables from which it should theoretically differ (discriminant validity). In order to test for convergent validity, correlations will be calculated between the PIBS and an existing general irrational belief scale, The Rational Behavior Inventory (Shorkey & Whiteman, 1977). To test for discriminant validity the PIBS will be correlated with the Internal-External Locus of Control Scale (Rotter, 1966), the Parenting Sense of Competence Scale (Gibaud-Wallston, 1977) and the Competence subscale of the Parenting Stress Index (Abidin, 1983). Parenting sense of competence and locus of control were chosen to assess discrimiant validity because they were judged to be signicantly different constructs from irrational beliefs. In order to demonstrate acceptable convergent and discriminant validity, it is expected that correlation coefficients for the PIBS and the measure of general irrational beliefs will be higher than correlations between the PIBS and the measures of parenting sense of efficacy.

Additional information regarding the construct validity of a scale may be garnered by exploring the factor structure of a scale. In order to determine whether certain items may

contribute to common factors on the PIBS principal component analysis will be used for preliminary analysis of the scale. Tabachnick and Fidell (1983) recommend using principal components extraction and varimax orthogonal rotation as a first step in exploring the factor structure of a scale because of its ability to extract the maximum variance from the data set. Using principal components analysis, one can estimate the rank of the observed correlation matrix, the number of factors, and variables that might be excluded from further analysis.

While the PIBS was based on Ellis' 11 irrational beliefs, it is not expected that the principal component analysis will yeild 11 factors. Tabachnick and Fidell (1983) suggest that it is "important to make the research inquiry broad enough to include 5 or 6 hypothesized factors so that the solution is stable" (p.378). The more factors one includes, the greater the percent of variance in the data set is explained by the factor solution, but the greater the number of factors included, the less parsimonious the solution. As such, Tabachnick and Fidell (1983) suggest that enough factors be included for an adequate fit, but not so many that parsimony is lost. Determining the "adequate" number of factors involves a series of explorations of the data and then a judgement of which solution best describes the data set. In the current study, principal component analysis is used as a first step

in exploring the factor structure. Further research will be needed in order to confirm the adequacy of the factor structure revealed by the principal component analysis. A scree test (Cattell, 1966), which gives the percent of variance for each factor separately and for the factors cumulatively, might be used as a second step in the analysis. From this one can determine the point at which inclusion of more factors adds very little to the variance accounted for by the solution.

A clinical scale needs to be reliable as well as valid. The reliability of a scale "refers to the consistency of scores obtained by the same persons when reexamined with the same test on different occasions, or with sets of equivilant items, or under other variable examining conditions" (Anastasi, p. 103, 1982). It would be important to explore whether individuals score consistently on the PIBS when examined on different occasions separated by varying lengths of time. Test-retest reliability of the PIBS is not examined in this study. It is an important area for future research.

For an irrational belief scale specific to parenting to be of use in identifying beliefs related to stress, it should be demonstrated that there is at least a moderate relationship between parent irrational beliefs and parenting stress. In order to explore this relationship, correlations between the PIBS, individual items on the PIBS, and the

Parenting Stress Index (Abidin, 1983) will be calculated.

Test norms must be established to help identify individuals who obtain either very high or low scores on the PIBS compared to the general population. To help establish preliminary norms, the PIBS will be administered to a group of women with children under the age of three. Mean, standard deviation, and percentile scores will be calculated for the test.

Statement of the Problem

The purpose of this study is to develop a scale to measure parent irrational beliefs and to explore the relationship between irrational beliefs and parent stress. Following the introduction is a review of the relevant literature. In Chapter 3 the methodology is reported and in Chapter 4 the results and discussion of the results are presented. The summary, conclusions, and implications for further research are presented in Chapter 5.

More specifically, the study was designed to address the following research questions:

1. Does the PIBS demonstrate acceptable concurrent validity such that there is a significant correlation between the PIBS and a general irrational belief scale?

2. Does the PIBS demonstrate acceptable convergent and discriminative validity such that it correlates more highly with a general irrational belief scale than it does with measures of parental efficacy and parental stress?

3. What is the factor structure of the Parent Irrational Belief Scale?

4. Does the PIBS demonstrate acceptable reliability in terms of internal consistency of the test items?

5. To what degree do women with children under the age of three hold parenting irrational beliefs as measured by the PIBS?

6. What are the levels of parenting stress, as measured by the Parenting Stress Index, experienced by women with children under the age of three? Can specific elements contributing to such stress be identified?

7. What is the relationship between parent irrational beliefs and parenting stress?

8. Do groups of mothers differing on the demographic variables of age, marital status, employment status, income level, education level, number of children, and degree of spousal involvement differ, in terms of irrational beliefs, level of efficacy, and stress level?

Definition of Terms

"Irrational beliefs" is used in a manner consistent with Ellis' 1963 theory of irrational ideation. Ellis defines irrational beliefs as magical, unrealistic, empirically unvalidated beliefs that usually take the form of rigid, dogmatic, absolutistic shoulds, oughts, musts, and demands.

"Parenting Stress" is stress reported by the mother as

measured by the Parenting Stress Index (Abidin, 1983).

"Parenting Self-Efficacy" and "Parent Sense of Efficacy" are used synonymously and are based on Bandura's (1982) theory of self-efficacy. Parenting self-efficacy is measured by the Parenting Sense of Competence Scale (Gibaud-Wallston, 1977), the Competence subscale of the Parenting Stress Index, and the Internal-External Locus of Control Scale (Rotter, 1966). Bandura defines sense of efficacy as an individual's judgement of how well he or she can execute a course of action required to deal with a prospective situation.

Delimitations of the Study

In this study, only the stress and beliefs of volunteer mothers of children under the age of three will be studied, therefore findings should not be generalized to other populations. If the findings of this study warrant it, future studies on fathers, specialized groups, and older subject samples might be worth carrying out.

The current study focuses specifically on Albert Ellis' construct of irrational ideation and not on parental cognitions or belief systems in general. For a review of parenting cognitions in the context of child rearing see a book by Sigel, 1985, Parental belief systems.

In the following chapter, the literature related to parenting stress and irrational beliefs will be reviewed.

Chapter 2

Review of Related Literature

Parenting Stress

A primary concern of past research in the area of parenting stress has been controversy over the view of parenthood as a crisis. Evidence gathered in early studies led some to conclude that the addition of a child precipitated a crisis in the family (Dyer, 1963; LeMasters, 1957). Other investigators questioned this view (Hobbs, 1965; Hobbs & Cole, 1976) and stressed the positive consequences of having a baby. Despite the disparity evident in the literature as to whether or not the transition to parenthood is a crisis, there is consensus that adding a child to the family is often stressful (Abidin, 1983; Alpert, Richardson, & Fodaski, 1983; Belsky, Spanier, & Rovine, 1983; Leifer, 1977; Ventura, 1987; Weinberg & Richardson, 1981; Younger, 1984).

Pearlin (1982) asserts that the primary mechanism through which childbearing exerts its stressful effects is change. Change can leave people with a sense of loss of control over their lives; it can erode the percepts by which people derive meaning from their experiences and may entail a rethinking of values; and it may cause a strong feeling of loss of the past. In the case of parenthood, many couples may be faced with a major restructuring of their complete lifestyle.

Sarason (1980) believes that change per se is stressful regardless of the desirability of the event. This is particularly true for mothers because they are faced with the primary tasks of childcare and nurturance, as well as maintaining the household and social relations with husband and friends (Weinberg & Richardson, 1981). Recent research indicates that, despite indications men are taking a more active role in cooking, cleaning, and looking after their children, women continue to bear the major responsibility for managing the household and the primary role in child care (Belsky, Lang & Huston, 1986; Cowan & Cowan, 1988). Studies comparing men and women during the transition to parenting indicate that, although both experience stress, the woman's stress is generally greater (Entwisle & Doering, 1981; Harriman, 1983; Miller & Sollie, 1980).

Gibaud-Wallston (1977, p.17) has outlined some of the stresses relevant to new mothers:

1. Reduced capacity or inability to meet one's own and one's spouse's needs due to new and conflicting demands upon one's resources,
2. Novel tasks of child care associated with the new parenting role,
3. Isolation or separation from previous social network,
4. Romanticized expectations about new parenthood leading to inappropriate standards or expectations

of the self,

5. Abrupt changes in societal expectations, such that women are increasingly expected to work after marriage and yet with the birth of a child there is pressure for the adoption of more traditional family roles,
6. Lack of clear standards of parenting performance,
7. Loss or diminution of roles (e.g., work role) supporting the sense of personal competence,
8. Inability to live up to personal standards met prior to the birth of the baby.

Several studies have examined the mediating factors which may determine how women cope with the stresses of parenthood. Younger (1984) examined factors predicting stress at 6-8 weeks post partum. She found that she could predict stress moderately well with a linear combination of variables including whether the pregnancy was wanted, whether it was planned, the characteristics of the child, and the rated stress of the pregnancy. Mother's personality strength, social support, and positive prior experience with childbirth were inversely related to parenting stress and mediated the effects of the stressor events, with personality being the strongest mediating variable.

Wilkie and Ames (1986) examined the relationship of infant crying to parental stress. They found that the amount of infant crying was related to parental feelings of

depression and that for mothers it was correlated with lower evaluation of baby and with the use of more negative categories in describing parenthood. Similar results have been found by Korner (1974), Pruet and Leonard (1978), and Williams, Painter, Lesley and Davidson (1980) indicating that infant irritability, crying, or colic can lead to parental feelings of depression, helplessness, anger, exhaustion, and rejection of the infant. In older children, activity level, or hyperactivity of the child, has been related to mother's stress level (Balkwell & Halverson, 1980; Mash & Johnston, 1983).

Several other factors have been investigated for their role in mediating parenting stress. These are social support (Cutrona, 1984), locus of control (Campis, Lyman & Prentice-Dunn, 1986; Mouton & Tuma, 1988), and parent sense of competence (Gibaud-Wallston, 1977; Gibaud-Wallston & Wandersman, 1978; Johnston & Mash, 1989). One factor which has not been explored to date is parent irrational beliefs. In addition, most studies have focused on the transition to parenthood, including a short period before the birth of the child and up to 3 months of age. Little research has been done on stress experienced by mothers during the first three years of parenthood which Abidin (1983) states is a critical period in the development of the parent-child relationship.

Cognitive Beliefs

Ellis' irrational beliefs.

The main tenet of Ellis' Rational-Emotive Theory (RET) is that thinking creates emotion (Ellis, 1979). Thinking and emotion do not constitute two separate processes but significantly overlap such that cognition is a mediating operation between stimuli and responses. Ellis (1979) stated that "what we call emotions and behaviors do not merely stem from peoples' reactions to their environments but also from their thoughts, beliefs, and attitudes about that environment" (p.37).

RET is a cognitive-affective behavioral theory that proposes that when a highly emotional consequence (C) follows a significant activating event (A), A may seem to cause C, but in reality does not. Rather, emotional consequences are largely created by the individual's belief system (B). Central to this ABC model is the proposal

> that man is a uniquely rational, as well as irrational, animal; that his emotional or psychological disturbances are largely a result of his thinking illogically or irrationally; and that he can rid himself of most of his emotional or mental unhappiness, ineffectuality, and disturbance if he learns to maximize his rational and minimize his irrational thinking (Ellis, 1963, p. 36).

Ellis (1987) defines "rational" as a predisposition to be

self-preserving, creative, sensuous, interested in others, to learn by mistakes and to actualize potential for life and growth. He defines "irrational" as a propensity to be self-destructive, hedonistic, to procrastinate, to repeat the same mistakes, to be superstitious, intolerant, perfectionistic, grandiose, and to avoid actualizing potentials for growth. He defines "irrational thinking" as magical, unrealistic, empirically unvalidated thinking that usually takes the form of rigid, dogmatic, absolutist shoulds, oughts, musts, and demands.

In his original theory, Ellis put forth a simple ABC framework explaining how individuals make themselves disturbed (Ellis, 1963). According to this theory, individuals are born with strong desires to be happy and bring to any situation or activating event (A) goals, purposes, and values. They commonly wish to succeed at work and relationships and to be loved and approved by significant others. In reality, however, peoples' lives are seldom the way they would like them to be and are fraught with blocks that tend to interfere with their desires and goals. When peoples' goals are frustrated by activating events (A) they tend to react in one of two basic ways. First, individuals have a set of rational beliefs (rBs) about A which usually take the form of wishes, wants, and preferences. When these are thwarted they react with appropriate feelings of sadness, frustration, or annoyance

and then go back to the activating event to see if they can improve things. If individuals stay with these rational beliefs, then the thwarting of their goals will be followed at point C (their cognitive, emotional, and behavioral consequences) with self-helping conduct. The second way in which people react results in making themselves mentally disturbed. This occurs when their goals are thwarted by A and they possess a set of irrational beliefs (iBs) about A, which take the form of absolutes, dogmatic shoulds, oughts, musts, and demands. For example: "Because I want to succeed, I must under all circumstances arrange to do so. If I fail I am absolutely no good and I absolutely must not, because it would be too awful and I could not stand it." When people bring this type of belief to an activating event the consequences (C) take the form of depression, anxiety, self-abuse, and self-pity, which are usually followed by self-defeating conduct.

Ellis noted a high degree of similarity between different individual's maladaptive belief systems. From these similarities he originally proposed a core set of 11 irrational beliefs that account for psychological disturbance. The 11 basic irrational beliefs are listed below:

1. It is a dire necessity to be loved or approved by almost everyone for virtually everything one does.
2. One should be thoroughly competent, adequate, and

achieving in all possible respects.

3. Certain people are bad, wicked, or villainous and should be severely blamed and punished for their sins.
4. It is terrible, horrible, and catastrophic when things are not the way one would like them.
5. Human unhappiness is externally caused and people have little ability to control their sorrows or rid themselves of their negative feelings.
6. If something is, or may be, fearsome or dangerous, one should be terribly occupied and upset about it.
7. It is easier to avoid facing many life difficulties and responsibilities than to face and undertake them.
8. The past is all important and because something once strongly affected one's life, it should continue to do so indefinitely.
9. Things and people should be different from the way they are and it is catastrophic if perfect solutions to the grim realities of life are not found.
10. Human happiness can be achieved by inertia and inaction or by passively and uncommittedly enjoying oneself.
11. One needs something other, or stronger, or greater

than oneself on which to rely.

More recently, Ellis (1987) declared that there are literally hundreds of irrational beliefs with which people make themselves severely anxious, depressed, and angry. He divided these beliefs into four large categories: (a) irrational beliefs about competence and success; (b) irrational beliefs about love and approval; (c) irrational beliefs about being treated fairly; and, (d) irrational beliefs about safety and comfort. To serve as an example, only two of the beliefs concerning love and approval are listed below. A complete list may be found in Ellis (1987).

1. "Because I strongly desire to be approved by people I find significant, I absolutely must have their approval (and I am an unlovable and worthless person if I do not)!"
2. "Because I strongly desire to be approved by people I find significant, and BECAUSE I ONLY WANT A LITTLE APPROVAL FROM THEM, I absolutely must have it!"

Measuring irrational beliefs.

While there are many studies supporting the RET hypothesis that irrational beliefs mediate the arousal of distress (for an extensive review see Ellis & Whitely, 1979), the interpretation of these studies has recently been criticized (Smith, 1982; Smith & Allred, 1986; Smith & Zurawski, 1983; Zurawski & Smith, 1987). Smith and Allred

(1986) reported recent evidence which indicates that existing measures of irrational beliefs may be seriously inadequate, and that these problems with measurement leave much of the empirical evidence indicating a relationship between beliefs and distress open to alternative interpretations. More specifically, the criticism rests in the contention that measures of irrational beliefs used in the aforementioned studies lack discriminant validity.

Most research studies investigating the role of irrational beliefs in emotional distress use simple correlational designs (for a review see Smith & Allred, 1986). Measures of irrational beliefs should correlate with measures of distress, but they should not correlate so highly as to be virtually indistinguishable. A measure of irrational beliefs should correlate with measures of distress, but not as highly as it correlates with a second measure of irrational beliefs.

Out of 15 existing measures of irrational beliefs, the two most commonly used are the Irrational Belief Test (IBT; Jones, 1968) and the Rational Behavior Inventory (RBI; Shorkey and Whiteman, 1977). From a review of studies, and their own research using the IBT and the RBI, Zurawski and Smith (1987) found that these two scales correlated as highly with various measures of distress as they did with each other (Table II-1).

Table II-1

Correlations for Measures of Depression, Anger Anxiety and Irrational Beliefs

Measure	1	2	3	4	5	6	7	8	9
1. IBT		.71	.66	.66	.70	.59	.61	.55	.38
2. RBI			.69	.73	.77	.70	.70	.50	.43
3. TMAS				.87	.86	.77	.89	.63	.44
4. IPATAS					.77	.73	.81	.70	.46
5. STAI-T						.81	.85	.57	.38
6. BDI							.80	.51	.40
7. D30								.55	.39
8. STAS-T									.38
9. AI									

N = 73. IBT = Irrational Beliefs Test; RBI = Rational Behavior Inventory; TMAS = Taylor Manifest Anxiety Scale; IPATS = Institute for Personality and Abilities Testing Anxiety Scale; STAT-T = Stait-Trait Anxiety Inventory-trait form; BDI = Beck depression Inventory; D30 = Dempsey Depression Scale; STAS-T = Stait-Trait Anger Scale-trait form; AI= Anger Inventory.

In another study (Smith & Zurawski, 1983) comparing correlations among the RBI, IBT, and several measures of anxiety, it was found that the correlation of the RBI total score with the IBT total score was significantly larger than the correlation of the RBI with each measure of anxiety. As such, the RBI demonstrated some degree of both convergent and discriminant validity. In contrast, the IBT could not be differentiated from general anxiety, evaluative anxiety, or cognitive anxiety.

Zurawski and Smith suggest that the IBT and the RBI, rather that measuring irrational beliefs, may simply be additional measures of distress. They state "it could be argued that the IBT and RBI are actually additional measures of the more parsimonious construct of distress and that previous correlations between measures of distress and beliefs actually reflect the hardly surprising convergence of two measures of the same construct" (1987, p.224). Zurawski and Smith's findings do not necessarily cast doubt on the RET model itself, because distress may be caused by a collection of irrational beliefs. They do emphasize, however, that in order to test the basic assumptions of the rational-emotive model, valid measures of irrational beliefs must be available.

Self-efficacy.

Bandura (1982) defined sense of efficacy as an individual's judgements of how well he or she can execute a

course of action required to deal with a prospective situation. He views self-efficacy as a central mechanism in human agency such that self perceptions of efficacy influence thought patterns, actions, and emotional arousal. Bandura states that the

> perceived self-efficacy helps to account for such diverse phenomena as changes in coping behavior produced by different modes of influence, level of physiological stress reactions, self-regulation of refractory behaviour, resignation and despondency to failure experiences, self-debilitating effects of proxy control and illusory inefficaciousness, achievement strivings, growth of intrinsic interest, and career pursuits (1982, p. 122).

In his 1977 model of how expectations of mastery affect initiation, persistence of coping, and outcome, Bandura distinguished efficacy expectations from response-outcome expectations. An outcome expectancy is defined as "a person's estimate that a given behavior will lead to certain outcomes" (1977, p. 193), whereas an efficacy expectation is "the conviction that one can successfully execute the behavior required to produce the outcomes" (p. 193). The differentiation is made between outcome and efficacy expectations because individuals can believe that a particular course of action will produce a certain outcome, but if they do not believe that they can perform the

activities they will not initiate the relevant behaviors.

Self-efficacy theory has been related to a wide spectrum of psychosocial functioning, including anxiety disorders (Bandura, Adams, Hardy & Howells, 1980; Bandura, Reese & Adams, 1982), depression (Davies & Yates, 1982; Kanfer & Zeiss, 1983), and motivation (Bandura & Adams, 1977; Bandura, Adams & Beyer, 1977; Bandura & Cervone, 1983; Bandura & Schunk, 1981). From these studies, Bandura concluded that self-efficacy acts as a cognitive mechanism in the mediation of human arousal. Unlike psychodynamic theories, which attribute anxiety to intrapsychic conflict and conditioning theories, which assume that formerly neutral events become stressful by association with painful experiences, Bandura's social learning theory proposes that it is mainly perceived inefficacy in coping with potentially aversive events that makes them fearsome and stressful. Thus, Bandura states

> people who judge themselves ineffacious dwell on their coping deficiencies and view trying situations as fraught with peril. They not only magnify the severity of possible threats but worry about perils that rarely, if ever, happen. As a result they experience a high level of cognitively generated distress. Elevated arousal, in turn, heightens preoccupation with personal inefficacy and potential calamities (1982, p.137).

Locus of control.

Rotter's (1966) concept of locus of control is closely related to, although somewhat different from, Bandura's self-efficacy. As defined by Rotter (1966), "locus of control" refers to the element of the self-concept that represents a person's generalized expectations as to whether his or her behavior results from personal efforts to make things happen (internal control) or, alternatively, whether it is due to chance, the actions of others, or to environmental constraints beyond the person's control (external control).

McLaughlin and Micklin (1983) view personal efficacy as the dimension of locus of control representing the extent to which individuals see themselves as being effective in manipulating or controlling their environment. Rotter's definition of locus of control, however, seems to be concerned solely with an individual's perception of control of outcomes (i.e., internal vs. external) and not with judgements about an individual's ability to perform the behavior necessary to produce the outcome.

Gibson and Dembo (1984) argue that locus of control is primarily concerned with causal beliefs about action-outcome contingencies (a person's estimate that a given behavior will lead to certain outcomes) whereas personal efficacy is concerned with the conviction that one can successfully execute the behavior required to produce the outcomes.

Thus, locus of control appears to be much more closely related to Bandura's concept of "outcome expectancy" than his concept of self-efficacy.

Summary

Research indicates that parenting in the early childhood years is stressful, and that one factor which has not been explored in mediating parenting stress is parent irrational beliefs. Existing irrational belief scales lack discriminative validity in that they correlate as highly with measures of general distress as they do with second measures of irrational beliefs. The primary purpose of this study is to develop and evaluate a scale to measure parent irrational beliefs and explore the relationship between irrational beliefs and parenting stress. The constructs of sense of efficacy and locus of control were chosen to examine the discriminative validity of the parenting irrational belief scale because the were judged to be significantly different theoretical constructs from irrational beliefs. It is predicted that parenting irrational beliefs will correlate more highly with a second measure of irrational beliefs than it will with measures of parent sense of efficacy, or competence, and locus of control. It is also predicted that a positive relationship will be found between parenting irrational beliefs and parenting stress.

Chapter 3

Methodology

This chapter sets out the procedure used for collecting data to explore the relationship between irrational beliefs and parenting stress. Each of the instruments included in the questionnaire is described.

Subjects

A total of 400 questionnaires were distributed to 10 Edmonton Public Health Centres located throughout the city of Edmonton. A high percentage of parents take their children for vaccination shots and routine checkups. Subjects were women with children under the age of three who volunteered to take the questionnaires home, fill them out and mail them back to the University. At the time of data analysis 129 questionnaires had been returned completed.

Procedure

A questionnaire developed specifically for the study (described in detail below) was distributed to women with children under age 3 through 10 Edmonton Public Health Centres. Questionnaires were placed in the waiting rooms along with a brief description of the study. The Health Centres were selected to reflect the social class makeup of the city. Volunteer subjects received a blank questionnaire, a stamped return envelope and a cover letter introducing the study and requesting their participation. All responses were anonymous.

Instruments

A questionnaire of approximately 200 items and consisting of 7 main sections was developed for the study. Subjects were requested to respond to each item by indicating their degree of agreement or disagreement using a 5 or 6 point Likert-type scale. Section one contained the Parent Irrational Belief Scale (PIBS) and section two the Rational Behavior Inventory (RBI, Shorkey & Whiteman, 1977). The RBI is a general irrational belief scale and was included to provide a measure of convergent validity for the PIBS. Parenting sense of efficacy was assessed using the Parenting Sense of Competence Scale (PSOC) (Gibaud-Walston, 1977), and the Internal-External Locus of Control Scale (IE) (Rotter, 1966). These two scales were included in sections three and four of the questionnaire.

In order to assess the degree of stress in the mother-child relationship, the fifth section of the questionnaire contained the Parenting Stress Index (PSI) developed by Abidin (1983). At the end of section five two statements (items 102 and 103) were included to provide a more subjective measure of stress than that given by the PSI, which tends to tap sources of stress rather than feelings of stress. These statements are "I find being a parent very stressful" and "Since becoming a parent I have felt that my life is more stressed."

The final section of the questionnaire consisted of

demographic data such as age of parent, marital status of parent, working status of parent, yearly household income, education level of the parent, number of children in the family, extent of father's involvement in child rearing, and whether the parent would be interested in attending a stress group. Individual instruments are described in detail below and copies of those permitted to be reproduced may be found in Appendix B.

Parent Irrational Belief Scale.

The PIBS, based on Ellis' (1963) 11 basic irrational beliefs, was developed by the author to measure a particular style of irrational, or rigid thinking, related to parenting. A pool of statements (5 for each of Ellis' 11 beliefs) pertaining specifically to parenting was developed and, based on a review for relevance and adequacy of construction, three statements for each of Ellis' 11 irrational beliefs were chosen. The items which were chosen were designed to assess individuals' unrealistic expections of their children and themselves as parents. In order to address the problem of a response set, 11 of the 33 items were reversed such that a "strong disagreement" response is keyed positively. The 33 item PIBS (Appendix A) was tested on a sample of 10 women varying in education level from grade 8 to post-secondary to assess ease of administration and readability of items, and then piloted on 50 women with children under the age of three. Subjects for the pilot

study were recruited from a group of parents visiting a family physician whose office was located in a middle class suburb. Volunteers received a questionnaire containing the PIBS and a section for demograhic data. All responses were anonymous and questionnaires were returned to the University in the self addressed, stamped envelope provided. Demographic data for the pilot sample is summarized in Table III-1.

To test for internal consistency of the PIBS an item analysis was run, including corrected-item total correlations and Chronbach alpha. Chronbach alpha for the scale was .86. The 33 item scale was then refined by taking the 2 items with the highest corrected item-total correlations from each of the 11 basic areas resulting in a 22 item Likert type scale with an internal reliability of .87. The scale was shortened in order to promote ease of administration and scoring.

Subjects respond to each statement on the PIBS by indicating their degree of agreement or disagreement using a five point scale. Scoring for items 5, 13, and 14 is reversed so that for all items, lower scores indicate a higher degree of irrational belief as do lower total scores on the PIBS.

In developing the PIBS an attempt was made to reflect Ellis' original theory of irrational ideation as closely as

Table 111-1
Demographic Data for the PIBS Pilot Study

Variable	Frequency	Percentage
Parental Age		
21 - 25 Years	5	10
26 - 30 Years	18	36
31 - 35 Years	14	28
36 - 45 Years	13	26
Marital Status		
Married	46	92
Divorced/Separated	1	2
Commonlaw	3	6
Employment Status		
Full time outside home	7	14
Part time outside home	11	22
Full time inside home	32	64
Education Level		
9 - 12th grade	19	38
Vocational School	11	22
College/University	15	30
Graduate School	8	16
Number of Children		
One	10	20
Two	24	48
Three	12	24
Four	4	8

possible. Items were chosen to represent each of Ellis' 11 beliefs, although it is recognized that some beliefs may be more important in the context of childrearing than others. Irrational ideation is conceptualized as a unitary construct which may be manifest in varying degrees. This is reflected in the choice of a Likert-type response format.

Rational Behavior Inventory.

The Rational Behavior Inventory (RBI) consists of 37 items scored on a five point Likert scale from "strongly agree" to "strongly disagree". It provides scores for specific irrational beliefs and total irrationality based on 11 factors. While development of the RBI was based on Ellis (1963) irrational beliefs, the 11 factors do not fully correspond with Ellis' 11 beliefs. Factor one relates to cognitive escalation of the seriousness of frustrating situations. Factor two measures feelings of guilt and attribution of guilt to others for deviations from traditional values and mores. Demand for perfection in all areas is measured by factor three. The fourth factor reflects the rationality of the frame of reference from which an individual makes value judgements about his or her attributes, ideas, and behaviors. The fifth factor addresses the demand that all people care for and help one another. Factor six measures the degree of blame and punishment of self and others. The seventh factor indicates the person's ability to counteract avoidance tendencies by

accepting difficulties and by working on unpleasant tasks. Factor eight looks at acceptance of independence in decision making and acceptance of the consequences of actions or decisions. The ninth factor deals with the tendency to upset oneself by negative evaluations of personal attributes and life circumstances. The tenth factor measures the tendency to upset oneself about possible future misfortunes, irrespective of the probability of their occurrence. Factor eleven measures the degree to which the respondent believes that he or she has control of his or her emotions.

The RBI has the most extensive data base of all psychometric assessments of irrational beliefs. There is considerable evidence of the internal and test-retest reliability of the RBI (Shorkey and Whiteman, 1977; Shorkey and Sutton-Simon, 1983). Normative data are available for college students. Split-half reliability is reported at .73 and test-retest reliability is reported at .82 and .71. Studies of its validity were provided by correlations with measures of distress (Smith and Allred, 1986), correlations with other measures of irrational beliefs (Ray and Smith, 1987; Smith and Zurawski, 1983; Zurawski and Smith, 1987), and sensitivity to the effects of RET procedures and therapy (Shorkey and Whiteman, 1977; Shorkey and Sutton-Simon, 1983). As with the PIBS low scores on the RBI indicate a higher degree of irrational thought.

Parenting Sense of Competence Scale.

The PSOC consists of 17 items scored on a 6 point Likert-type scale from "Strongly Agree" to "Strongly Disagree". It contains two subscales, each of which assesses a different aspect of parenting competence. The first subscale, labelled "Skill-Knowledge", reflects the degree to which a parent feels he or she has acquired the skill and understanding necessary to be a good parent. The second subscale is "Valuing/Comfort" and measures the amount of value a parent places on parenthood and how comfortable he or she feels in the parenting role. Factor analysis of the PSOC (Johnston and Mash, 1989) revealed two factors: (1) satisfaction, an affective dimension reflecting parenting frustration, anxiety, and motivation; and (2) efficacy, an instrumental dimension reflecting competence, problem solving ability, and capability in the parenting role.

The PSOC possesses satisfactory internal consistency (.80 for Skill/Knowledge, .69 for Valuing/Comfort and .80 for total score), appears reliable over time (.80 for six weeks and .73 for four months) and relates moderately with other measures of self-esteem. The PSOC has also been shown to relate to child characteristics in terms of ease of management and availability of marital and social support systems (Gibaud-Wallston and Wandersman, 1978).

Internal-External Locus of Control Scale.

The IE is a forced choice test consisting of 29 pairs

of statements, including 6 fillers, designed to measure internal vs. external locus of control. In each pair, agreement with one of the statements is an indicator of perceived internal control, and agreement with the other statement indicates perceived external control. Previous studies using the IE scale (e.g., Gurin, Gurin, Lao & Beattie, 1969) have divided the scores into two separate factors; control ideology (17 items) and personal control (6 items). The referent of control ideology is people in general, whereas the personal control referent is the respondent.

Internal consistency estimates for the IE are moderately high (Kuder-Richardson = .69 -.76), as are estimates of test-retest reliability (.60 to .83 for 1 month and .49 to .61 for 2 months). The scale correlates satisfactorily with other methods of assessing the same variable and correlations with such test variables as adjustment, social desirability or need for approval, and intelligence are low and indicate good discriminant validity.

Parenting Stress Index.

The PSI is a 101 item scale which examines the degree of stress in the parent-child system. It contains 13 subscales, six of which contribute to a Child Characteristics Domain and seven to a Parent Characteristics Domain, and yields a total PSI score as well as subscale

scores. The questions in the child domain are designed to reveal stresses a mother is likely to experience arising from the manner in which she perceives her child and the demands her child makes of her. The parent domain reflects stress arising from the mother's perception of herself and her functioning as a parent. Specific sources of stress within each domain may be identified and include such areas as the degree of adaptability of the child, the child's reinforcing qualities, degree of demandingness, the child's activity level, and the parent's subjective feeling of being trapped by parenting responsibilities, social isolation, attachment to child, spousal and social support system. The PSI has demonstrated acceptable levels of internal consistency (.89, .93 and .95 for the Child Domain, Parent Domain and Total Stress score, respectively) and satisfactory test-retest reliability (coefficients range from .63, .91 and .96 for a one to three month period to .55, .70 and .65 for a one year period). Adequate concurrent, construct, and discriminant validity have been demonstrated and reported in the PSI manual (Abidin, 1983).

In the following chapter the results of the study as well as a discussion of the results are presented.

Chapter 4

Results

Description of the Sample

Demographic data from the sample is summarized in Table IV-1. The majority of respondents were married (78%) and ranged in age from 21 to 35 years. Fifty six (43.8%) of the women were full-time homemakers. Forty eight (37.5%) worked full time outside the home and twenty three (18%) worked part time. Data on employment status was missing for two subjects. With regard to average yearly household income, subjects were fairly representative of all socio-economic levels. Sixteen subjects (12.6%) reported earnings of less than 15 thousand dollars per year; twenty one (16.5%) were in the 15 to 20 thousand dollar range; twenty eight (22%) were in the 20 to 30 thousand dollar range; twenty nine (22.8%) were in the 30 to 40 thousand dollar range; thirty three (26%) reported incomes of more than 40 thousand dollars per year, and data was missing for two subjects. With regard to education level, eight subjects (6.3%) had a grade 1 to 8 education; forty two (33.1%) attained the 9th to 12th grade; thirty one (24.4%) had vocational or some college; forty five (35.4%) were college or university graduates; one (.8%) attended graduate school; and data was missing on two subjects. In terms of number of children, sixty respondents (46.5%) had one child only; forty five

Table IV-1
Demographic Data

Variable	Frequency	Percentage
Parent Age		
16 - 20 years	2	1.6
21 - 25 years	28	21.7
26 - 30 years	54	41.9
31 - 35 years	32	24.8
36 - 45 years	13	10.1
Marital Status		
Single	12	9.4
Married	100	78.1
Divorced/Separated	8	6.3
Living commonlaw	6	4.7
Employment Status		
Full time in home	56	43.8
Full time outside home	48	37.5
Part time outside home	23	18.0
Average Yearly Household Income		
Less than 15 thousand	16	12.6
15 - 20 thousand	21	16.5
20 - 30 thousand	28	22.0
30 - 40 thousand	29	22.8
More than 40 thousand	33	26.0
Education Level		
1 - 8th grade	8	6.3
9 - 12th grade	42	33.1
Vocational	31	24.4
College/University grad.	45	35.4
Graduate School	1	.8
Number of Children		
One	60	46.5
Two	45	34.9
Three	14	10.9
Four	8	6.2
Five	2	1.6

N = 129
Data is missing for 3 subjects regarding marital status and for 2 subjects regarding employment status, income level, and education level.

(34.9%) had two children; fourteen (10.9%) had three; eight (6.2%) had four children; and two (1.6%) had five children.

Validity and reliability of the Parent Irrational Belief Scale

Validity of the PIBS was tested by computing Pearson Product Moment Correlations between the PIBS, the RBI, the PSOC, the IE and the Competence subscale of the PSI. These are reported in Table IV-2. The correlation coefficient for the PIBS and RBI was .69 ($p = .000$) suggesting that the two scales are quite highly related and the PIBS demonstrates acceptable convergent validity. The PIBS did not correlate highly with the PSOC ($r = .11$, $p = .105$) nor the IE ($r = .10$, $p = .121$) and correlated moderately ($r = -.48$, $p = .000$) with the Competence subscale of the PSI. The PSOC and PSI Competence subscale were viewed as measures of a similar construct, however, the correlation between the two (-.34, $p = .000$) suggests that this may not be so. Implications for the difference in the correlations between the PIBS and the PSOC and the PIBS and PSI Competence Subscale will be explored in the discussion section.

To test for internal reliability of the PIBS a discriminant item analysis, including computation of Cronbach alpha coefficient and item-total correlations, was performed. Corrected item-total correlations ranged from -.03 to .60. These are reported in Table IV-3. Two of the items had very low item-total correlations and the remaining

20 ranged from .30 to .60. The two items with low correlations were "I feel that I must deal with discipline problems when they happen" (-.03) and "When I have a problem with my child I feel it is best to wait and see if it fixes itself" (.01). Cronbach's alpha for the scale with these two items included is .85 and with them deleted it is .86. Both items were developed from Ellis' original idea that you can more easily avoid facing life difficulties and responsibilities than undertake more rewarding forms of self discipline. Inclusion or deletion of these items from the scale will be discussed in the section on factor analysis.

Table IV-2
Pearson Product Moment Correlations

	PIBS	RBI	PSOC	IE	R. STRESS
RBI	.69*				
PSOC	.11	.05			
IE	.10	.18	.00		
R.Stress	.30*	.46*	.27*	.03	
PSI	-.47*	-.53*	-.31*	-.05	-.65*
CHILD	-.40*	-.45*	-.29*	-.01	-.53*
Adapt	-.27*	-.35*	-.23	-.00	-.44*
Accept	-.23	-.24	-.06	-.02	-.15
Demand	-.37*	-.46*	-.23	-.00	-.46*
Mood	-.20	-.21	-.31*	-.00	-.44*
Hyp	-.42*	-.42*	-.29*	-.05	-.50*
Reinfor	-.20	-.21	-.12	-.04	-.30*
PARENT	-.51*	-.53*	-.30*	-.07	-.67*
Depress	-.47*	-.48*	-.20	-.03	-.56*
Attach	-.08	-.06	-.30*	-.02	-.24
Restrct	-.39*	-.50*	-.25	-.04	-.63*
Compet	-.48*	-.43*	-.34*	-.06	-.58*
Isolat	-.45*	-.46*	-.20	-.12	-.49*
Spouse	-.39*	-.41*	-.11	-.10	-.39*
Health	-.30*	-.33*	-.20	-.03	-.62*

* indicates that the correlation coefficients are significant at the .001 level.
N = 129
PIBS = Parent Irrational Belief Scale. RBI = Rational Behavior Inventory. PSOC = Parenting Sense of Competence Scale. IE = Internal/External Locus of Control Scale. R. STRESS = Reported stress. PSI = Parenting Stress Index. The following are subscales of the PSI: CHILD = Total child domain of the PSI. Adapt = Child adaptability; Accept = Child acceptability; Demand = Child demandingness; Mood = Child mood; Hyp = Child hyperactivity/distractibility; Reinfor = Child reinforces parent; PARENT = Total parent domain of the PSI; Depress = Parent Depression; Attach = Parent attachment to child; Restrct = Parent restriction; Compet = Parent sense of competence; Isolat = Parent social isolation; Spouse = Relationship with spouse; Health = Parent Health.

Table IV-3
Parenting Irrational Belief Scale
Corrected item-total Correlations

Item		Correlation
1.	I must always be a loving parent in order to gain the approval of my child.	.48
9.	Parents must be loved by their children.	.30
10.	If I am not a perfect parent them I am a failure.	.43
16.	When my child does something wrong I feel that I have failed as a parent.	.60
11.	When I say things to my child that I don't really mean I feel that I am basically a bad person.	.56
17.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	.56
2.	It is terrible when my child is not the way I would like him or her to be.	.47
18.	It is terrible when I can not give my child the things I would like to give.	.59
3.	I have no choice but to feel hurt when criticised as a parent.	.57
19.	I feel that I have no choice but to feel angry when my child does something wrong.	.47
4.	I constantly worry that some harm may come to my child.	.59
12.	I constantly worry that I will make a terrible mistake as a parent.	.59
5.	I feel that I must deal with discipline problems when they happen.	-.03
20.	When I have a problem with my child I feel it is best to wait and see if it fixes itself.	.01
13.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	.37
21.	Whenever I have to make a decision concerning my child I ask someone for advice.	.36
6.	Whether I am a good or bad parent depends entirely on the way I was raised as a child.	.32
14.	I can learn from my experiences as a child and use them to become a better parent.	.32

7.	I get terribly upset when I see people treating their children differently than I would.	.39
22.	I am constantly bothered by the problems other people have in raising their children.	.41
8.	I feel that there is only one right way to raise children.	.42
15.	I feel that there is a perfect solution to every problem I encounter with my child.	.46

Sample total=129
Reliability Coefficient Cronbach alpha=.85
Scale Mean=78.88 Standard Deviation=11.29
Items are clustered according to the Ellis beliefs from which they were developed.

Factor Analysis of the Parent Irrational Belief Scale

The factor structure of the PIBS was investigated using principal-component analysis as a method of extraction and orthogonal varimax as choice of rotation (SPSSx, 1983). This method is recommended as a first step in a preliminary analysis of the factor structure of a scale (Tabachnick & Fidell, 1983). Principal component analysis revealed six factors with eigenvalues greater than one. The first factor accounted for 27.6 percent of the variance and the other five factors each accounted for less than 10 percent. The six factors together accounted for 58.9 percent of the total variance. Communality estimates, eigenvalues, and percent of variance are presented in Table IV-4.

Principal component analysis was repeated using only those items with a factor loading greater than .30 in order to make the factors more interpretable. Tabachnick and Fidell (1983) suggest that loadings in excess of .30 are eligible for interpretation, whereas lower ones are not because they represent less than 9% overlap in variance between the variable and the factor. The results are reported in Table lV-5. Table lV-6 presents the PIBS items which loaded most heavily on each of the factors in decending order. All 22 items were included in the analysis.

Table IV-4
Summary of Factor Statistics

Item	Communality	Factor	Eignevalue	% Var	Clm %
1	.462	1	6.08	27.6	27.6
2	.585	2	1.79	8.1	35.8
3	.496	3	1.57	7.1	42.9
4	.606	4	1.33	6.0	49.0
5	.555	5	1.18	5.4	54.3
6	.494	6	1.01	4.6	58.9
7	.630				
8	.749				
9	.621				
10	.636				
11	.613				
12	.673				
13	.545				
14	.460				
15	.639				
16	.632				
17	.645				
18	.589				
19	.374				
20	.622				
21	.657				
22	.673				

Table IV-5
Varimax Rotation for Principal Component Extraction

	1	2	3	4	5	6
P12	.748		.308			
P18	.683					
P4	.679					.315
P11	.665					
P19	.584					
P3	.570					
P21	.528			.316	.402	-.325
P1	.520	.320				
P13	.476		.468			
P16	.446	.428			.339	
P15		.753				
P8		.625	.399	.355		
P6	.323	.461		-.355		
P10			.662	.316		
P14			.604			
P17	.392	.396	.571			
P22				.749		
P9	.345			.556	-.348	
P20					.742	
P5			-.330		-.619	
P7						.735
P2		.366				.597

Table IV-6
Factor Structure of the Parent Irrational Belief Scale

Factor		Loading
1.	WORRY (Eigenvalue=6.08)	
12.	I constantly worry that I will make a terrible mistake as a parent.	.748
18.	It is terrible when I can not give my child the things I would like to give.	.683
4.	I constantly worry that some harm may come to my child.	.679
11.	When I say things to my child that I don't really mean I feel that I am basically a bad person.	.665
19.	I feel that I have no choice but to feel angry when my child does something wrong.	.584
3.	I have no choice but to feel hurt when criticised as a parent.	.570
21.	Whenever I have to make a decision concerning my child I ask someone for advice.	.528
1.	I must always be a loving parent in order to gain the approval of my child.	.520
13.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	.476
16.	When my child does something wrong I feel that I have failed as a parent.	.446
17.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	.392
9.	Parents must be loved by their children.	.345
6.	Whether I am a good or bad parent depends entirely on the way I was raised as a child.	.323
11.	RIGIDITY (Eigenvalue=1.79)	
15.	I feel that there is a perfect solution to every problem that I encounter with my child.	.753
8.	I feel that there is only one right way to raise children.	.625
6.	Whether I am a good or bad parent depends entirely on the way I was raised as a child.	.461
16.	When my child does something wrong I feel that I have failed as a parent.	.428
17.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	.396
2.	It is terrible when my child is not the	

	way I would like him or her to be.	.366
1.	I must always be a loving parent in order to gain the approval of my child.	.320

111. SECURE NEED FOR PERFECTION (Eigenvalue=1.57)

10.	If I am not a perfect parent then I am a failure.	.662
14.	I can learn from my experiences as a child and use them to become a better parent.	.604
17.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	.571
13.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	.468
8.	I feel that there is only one right way to raise children.	.399
5.	I feel I must deal with discipline problems when they happen.	-.330
12.	I constantly worry that I will make a terrible mistake as a parent.	.308

1V. INSECURE NEED FOR PERFECTION (Eigenvalue=1.32)

22.	I am constantly bothered by the problems other people have in raising their children.	.749
9.	Parents must be loved by their children.	.556
8.	I feel that there is only one right way to raise children.	.355
6.	Whether I am a good or bad parent depends entirely on the way I was raised as a child.	-.355
10.	If I am not a perfect parent, then I am a failure.	.316
21.	Whenever I have to make a decision concerning my child I ask someone for advise.	.316

V. INDECISION (Eigenvalue=1.18)

20.	When I have a problem with my child I feel it is best to wait and see if it fixes itself.	.742
5.	I feel I must deal with discipline problems when they happen.	-.619
21.	Whenever I have to make a decision concerning my child I ask someone for advice.	.402
9.	Parents must be loved by their children.	-.348
16.	When my child does something wrong I	

	feel that I have failed as a parent.	.339
V1.	TENDENCY TO CATASTROPHIZE (Eigenvalue=1.01)	
7.	I get terribly upset when I see people treating their children differently than I would.	.735
2.	It is terrible when my child is not the way I would like him or her to be.	.597
21.	Whenever I have to make a decision concerning my child I ask someone for advise.	-.325
4.	I constantly worry that some harm may come to my child.	.315

The items loading on the first factor, which accounted for 27.6 percent of the variance, reflected the parent's worry about mistakes and what may happen to their child and may be conceptualized as a "Worry" factor. The second factor, accounting for 8.1 percent of the variance, seems to reflect rigid or dogmatic thinking in regard to parenting and will be labelled "Rigidity". The third (7.1 percent of the variance) and fourth (6.0 percent of the variance) factors are quite similar and seem to reflect a need for perfectionism as a parent. The third factor seems to tap a more secure type of need for perfection such that the individual feels able to deal with most parenting problems and will be labelled "Secure Need for Perfection". The fourth factor seems more reflective of individuals who are anxious about their parenting skills and will be labelled "Insecure Need for Perfection". The fifth factor, which accounts for 5.4 percent of the varience, reflects parent sense of competence and will be labelled "Indecision" and the sixth factor, which accounts for 4.6 percent of the variance, reflects a tendency to exaggerate difficulties and will be labelled "Tendency to Catastrophize".

The two items (5 and 20) which have low corrected item-total correlations loaded heavily on the fifth factor, Indecision. Since deleting these items from the scale has little effect on the internal consistency of the PIBS these items will be retained for future analysis. Several of the

factors revealed by the Principal Component analysis account for an insignificant amount of the variance in the scale and a number of items load on more than one factor. Further study is needed on the PIBS in order to confirm the factor structure of the scale. This might include a scree test (Catell, 1966) and Principal Factors analysis using various types of rotation.

Parent Irrational Beliefs

Mean, standard deviation, range and percentile scores for the PIBS are presented in Table 1V-7. Subjects' total scores for the PIBS ranged from 43 to 104 with a mean score of 79.17 and standard deviation of 11.57. The frequency histogram indicates that subjects' scores approximate a normal distribution which is slightly scewed to the higher end of the scale, or towards more rational thinking. Twenty five percent of the sample scored below 71; 50 percent of the sample scored between 71 and 87; and 25 percent scored between 87 and 104.

Frequencies, percentages, and mean responses for each item are presented in Table IV-8. Examination of responses to individual items does indicate that parents are more irrational in certain areas. Fifty seven percent of the subjects indicated that they constantly worry that some harm may come to their child (Mean=2.47) and 47% felt that parents must be loved by their children (Mean=2.60). Thirty eight percent indicated that they must always be loving

parents in order to gain the approval of their children (Mean=3.05) and that they have no choice but to feel hurt when criticized as parents (Mean=3.22). These items correspond with the "Worry" factor on the PIBS.

A number of items indicating more rational parent beliefs were highly endorsed (Means >4.00). Ninety percent of the sample either disagreed or strongly disagreed with the statement "If I am not a perfect parent then I am a failure." Eighty four percent disagreed or strongly disagreed to the statement "When I do something wrong as a parent, which I feel is wrong, it means that I am a bad person and should be punished." Eigty two percent of the sample disagreed or strongly disagreed with the statement "When my child does something wrong I feel that I have failed as a parent" and 80 percent disagreed or strongly disagreed to the idea that there is a perfect solution to every problem they encounter with their child. Clustering of these items suggests that subjects are more rational in the area of need for perfection as a parent.

Norms for the PIBS based on the factor structure of the scale will be helpful in interpreting scores, but will not be calculated until the factor structure of the PIBS has been confirmed through further analysis.

Table 1V-7
Frequency Histogram and Percentile Scores

Count	Midpoint	One Symbol Equals Aprox. .40 Occurances
1	43	***
0	46	
0	49	
1	52	***
1	55	***
3	58	********
3	61	********
7	64	*******************
9	67	************************
10	70	**************************
10	73	**************************
7	76	*******************
14	79	************************************
13	82	**********************************
16	85	**
12	88	********************************
7	91	*******************
5	94	**************
5	97	**************
2	100	*****
3	103	********

```
1....+....1....+....1....+....1....+....1....+
0          4          8         12         16
```

Mean = 79.17 Standard Dev. = 11.54
Minimum = 43 Maximum = 104 N = 129

Percentile	Value	Percentile	Value	Percentile	Value
25	71	50	80	75	87

Table IV-8
Frequencies, Percentages and Means for
Individual PIBS Items

1. I must always be a loving parent in order to gain the approval of my child.

Value*	Frequency	%	Mean	Std Dev
1	13	10.1	3.05	1.20
2	37	28.7		
3	22	17.1		
4	44	34.1		
5	13	10.1		

2. It is terrible when my child is not the way I would like him or her to be.

Value	Frequency	%	Mean	Std Dev
1	4	3.1	3.67	1.11
2	21	16.3		
3	21	16.3		
4	50	38.8		
5	33	25.6		

3. I have no choice but to feel hurt when criticized as a parent.

Value	Frequency	%	Mean	Std Dev
1	12	9.3	3.22	1.30
2	37	28.7		
3	15	11.6		
4	40	31.0		
5	25	19.4		

4. I constantly worry that some harm may come to my child.

Value	Frequency	%	Mean	Std Dev
1	33	25.6	2.47	1.22
2	41	31.8		
3	24	18.6		
4	23	17.8		
5	8	6.2		

5. I feel that I must deal with discipline problems when they happen.

Value	Frequency	%	Mean	Std Dev
1	63	48.8	1.65	.826
2	57	44.2		
3	2	1.6		

4	5	3.9
5	2	1.6

6. Whether I am a good or bad parent depends entirely on the way I was raised as a child.

Value	Frequency	%	Mean	Std Dev
1	4	3.1	3.89	1.18
2	20	15.5		
3	13	10.1		
4	41	31.8		
5	51	39.5		

7. I get terribly upset when I see people treating their children differently than I would.

Value	Frequency	%	Mean	Std Dev
1	6	4.7	3.28	1.10
2	28	21.7		
3	37	28.7		
4	39	30.2		
5	16	14.7		

8. I feel that there is only one right way to raise children.

Value	Frequency	%	Mean	Std Dev
1	2	1.6	4.30	.89
2	4	3.1		
3	14	10.9		
4	42	32.6		
5	19	14.7		

9. Parents must be loved by their children.

Value	Frequency	%	Mean	Std Dev
1	28	21.7	2.60	1.17
2	33	25.6		
3	37	28.7		
4	24	18.6		
5	7	5.4		

10. If I am not a perfect parent then I am a failure.

Value	Frequency	%	Mean	Std Dev
1	3	2.3	4.45	.88
2	3	2.3		
3	7	5.4		
4	36	27.9		
5	80	62.0		

11. When I say things to my child which I don't really mean

I feel that I am basically a bad person.

Value	Frequency	%	Mean	Std Dev
1	7	5.4	3.37	1.18
2	27	20.9		
3	18	14.0		
4	52	40.3		
5	25	19.4		

12. I constantly worry that I will make a terrible mistake as a parent.

Value	Frequency	%	Mean	Std Dev
1	8	6.2	3.43	1.23
2	29	22.5		
3	20	15.5		
4	43	33.3		
5	29	22.5		

13. I have faith in my own ability to deal with most problems that I may encounter as a parent.

Value	Frequency	%	Mean	Std Dev
1	0	0.0	4.06	.80
2	10	7.8		
3	8	6.2		
4	75	58.1		
5	36	27.9		

14. I can learn from my experiences as a child and use them to become a better parent.

Value	Frequency	%	Mean	Std Dev
1	3	2.3	4.15	.93
2	5	3.9		
3	15	11.6		
4	52	40.3		
5	54	41.9		

15. I feel that there is a perfect solution to every problem that I encounter as a parent.

Value	Frequency	%	Mean	Std Dev
1	4	3.1	4.01	1.01
2	10	7.8		
3	11	8.5		
4	59	45.7		
5	45	34.9		

16. When my child does something wrong I feel that I have failed as a parent.

Value	Frequency	%	Mean	Std Dev
1	0	0.0	4.16	.77
2	4	3.1		
3	18	14.0		
4	60	46.5		
5	47	46.4		

17. When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.

Value	Frequency	%	Mean	Std Dev
1	2	1.6	4.29	.87
2	3	2.3		
3	15	11.6		
4	44	34.1		

18. It is terrible when I can not give my children the things I would like to give.

Value	Frequency	%	Mean	Std Dev
1	4	3.1	3.52	1.17
2	27	20.9		
3	28	21.7		
4	37	28.7		
5	33	25.6		

19. I feel that I have no choice but to feel angry when my child does something wrong.

Value	Frequency	%	Mean	Std Dev
1	2	1.6	3.87	.97
2	13	10.1		
3	19	14.7		
4	60	46.5		
5	35	27.1		

20. When I have a problem with my child I feel it is best to wait and see if it fixes itself.

Value	Frequency	%	Mean	Std Dev
1	2	1.6	3.82	.95
2	11	8.5		
3	26	20.2		
4	58	45.0		
5	32	24.8		

21. Whenever I have to make a decision concerning my child I ask someone for advise.

Value	Frequency	%	Mean	Std Dev
1	1	0.8	3.63	.94
2	16	12.4		

3	35	27.1
4	54	41.9
5	23	17.8

22. I am constantly bothered by the problems other people have in raising children.

Value	Frequency	%	Mean	Std Dev
1	0	0.0	4.09	.87
2	7	5.4		
3	22	17.1		
4	52	40.3		
5	48	37.2		

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* 1 = Strong Agreement
2 = Agree
3 = Neutral
4 = Disagreement
5 = Strong Disagreement

Levels of Maternal Stress and Contributing Factors

Range of scores, means, and standard deviations for the Parenting Stress Index and subscales are summarized in Table IV-9. Total scores on the PSI range from 138 to 398 with a mean score of 237.89. According to the PSI manual, these scores fall in the normal range with the mean a little higher than average (70th percentile) indicating that women who participated in the study are fairly well adjusted parents but are experiencing some stress. Ninety two percent of the subjects reported that they enjoyed being a parent. Twenty one percent felt they were very good parents and 76% felt they were average or better than average parents. Despite reports of finding parenting enjoyable, some subjects did report that they found parenting stressful. In response to the statement "I find being a parent very stressful" 7.8% of the subjects strongly agreed and 39.5 % agreed. In response to the statement "Since becoming a parent I have felt that my life is more stressed" 10.1% strongly agreed and 45.7% agreed.

In order to determine whether certain factors on the PSI contributed to reported stress more than others, Pearson product moment correlations were computed between the PSI subscales and reported stress. The correlations are summarized in Table IV-2. Results of the analysis indicate that Parent Characteristics ($r = -.67$, $p = .000$) are

Table IV-9

Range, Means, Standard Deviations and Percentiles for the Parenting Stress Index (PSI), PSI Subscales, Parent Irrational Belief Scale (PIBS), Rational Behaviour Inventory (RBI),and the Parenting Sense of Competence Scale (PSOC).

Scale	Range	Mean	Std. Dev.	%ile
PSI Total	138 - 398	237.89	44.87	70
PSI Subscales				
Child Total	68 - 174	104.73	20.42	65
Adaptability	16 - 43	26.22	5.86	65
Acceptability	3 - 26	12.66	3.56	50
Demandingness	9 - 39	19.95	5.53	70
Child mood	5 - 23	10.58	3.13	60
Hyperactivity	13 - 44	24.86	5.60	60
Reinforces	6 - 21	10.43	3.38	65
Parent Total	70 - 224	133.16	27.46	70
Depression	9 - 40	21.76	6.00	60
Attachment	7 - 23	13.32	3.36	65
Restriction	7 - 35	19.11	5.61	65
Competence	16 - 50	30.86	6.54	60
Isolation	6 - 30	14.25	4.59	70
Relationship	8 - 35	19.11	5.61	70
Parent health	5 - 25	13.52	3.95	75
PIBS	43 - 104	79.17	11.57	
RBI	10 - 37	25.80	6.04	
PSOC	25 - 88	67.30	11.44	

*Percentiles apply only to the Parenting Stress Index and subscales and are based on norms for the PSI (Abidin, 1983).

more related to reported stress than Child Characteristics ($r = -.53$, $P = .000$). Factors in the Parent Characteristics Domain which correlate significantly with reported stress are Restrictions Imposed by Parental Role ($r = -.63$, $p = .000$), Parent Health ($r = -.62$, $p = .000$), Sense of Competence ($r = -.58$, $p = .000$), Depression ($r = -.56$, $p = .000$) and Social Isolation ($r = -.49$, $p = .000$). The Restrictions Imposed by Parental Role subscale measures the degree to which parents experience the parental role as restricting their freedom and frustrating them in their attempts to maintain their own identity. The Parent Health subscale measures deterioration in parental health which may either be the result of stress or an additional stressor in the parent-child system. The Sense of Competence subscale measures belief about ability to handle the demands of parenting. The Depression subscale assesses the presence of significant depression such that the parent finds it difficult to mobilize the psychic and physical energy to fulfill parenting responsibilities. The Social Isolation subscale measures degree of isolation from peers, relatives, and other emotional support systems.

Factors in the Child Characteristics Domain which correlate with reported stress are Hyperactivity /Distractibility ($r = -.50$, $p = .000$), Demandingness ($r = -.46$, $p = .000$), Mood ($r = -.44$, $p = .000$) and Adaptability ($r = -.44$, $p = .000$). The Hyperactivity/Distractibility

subscale of the PSI measures the degree to which the parent feels the child displays behaviors such as overactivity, restlessness, distractibility, and short attention span. The Demandingness subscale assesses the degree to which the parent perceives the child as whiny and overly demanding of his or her attention. Child Mood reflects the degree to which the parent perceives the child as unhappy and crying too much. Child adaptability assesses the parent's perception of the degree of difficulty with behaviors such as perseveration and inability to change from one task to another without emotional upset, overreaction to changes in sensory stimulation, avoidance of strangers, overreaction to changes in routine, and child being difficult to calm down once upset.

Examination of the mean subscale scores on the PSI indicates that subjects reported more difficulties in the areas of Child Demandingness (70th percentile), Social Isolation (70th percentile), Relationship with Spouse (70th percentile), and Parent Health (75th percentile). High scores on Child Demandingness indicate that the parent perceives the child to be overly demanding of attention whether it be through crying, physically hanging on the parent, frequent requests for help, or a high frequency of minor problem behaviors. Individuals who score high on Social Isolation and Relationship With Spouse are socially isolated from their peers, relatives, and other emotional

supports systems and are lacking emotional and active support from their spouses in the area of child care. High scores on Parent Health indicate that the parent is having difficulty coping with the parental role due to health problems which may be the result of stress or an additional stressor in the parent-child system.

Relationship Between Irrational Beliefs and Parenting Stress

In order to examine the relationship between irrational beliefs and parenting stress, Pearson Product Moment Correlations were calculated between the PSI total scores, subscale scores, reported stress scores, the PIBS, and the RBI. These are summarized in Table IV-2. A correlation coefficient of -.47 ($p = .000$) was found between the PSI total score and the PIBS indicating a significant relationship between parenting stress and parenting irrational beliefs. The correlation coefficient for the PSI and the general irrational belief scale, the RBI, was -.53 ($p = .000$) suggesting that irrational beliefs in general, as well as specific parenting irrational beliefs, are significantly related to parenting stress. A correlation coefficient of -.30 ($p = .000$) was found between reported stress and the PIBS. The correlation coefficient for reported stress and the RBI was -.46 ($p = .000$). Reported stress was measured by subjects, responses to two statements: "I find being a parent very stressful" and "Since becoming a parent I have felt that my life is more

stressed."

Correlation coefficients between the PSI subscales and the PIBS ranged from -.08 (p = .167) for Parent Attachment to Child to -.48 (p = .000) for Parent Sense of Competence. Parent Depression was also significantly related with a correlation coefficient of -.47 (p = .000). The Parent Characteristics Domain (r = -.51, p = .000) seems to be more highly related to parent irrational beliefs than the Child Characteristics Domain (r = -.40, p = .000).
Correlation coefficients between the PSI subscales and the RBI ranged from -.06 (p = .229) for Parent Attachment to Child to -.50 (p = .000) for Restrictions Imposed by Parental Role. As with the PIBS, Parent Depression was also significantly related (r = -.48, p = .000) and the Parent Characteristics Domain (r = -.53, p = .000) was more highly related than the Child Characteristics Domain (r = -.45, p = .000).

Pearson Product Moment correlation coefficients were also calculated between individual items on the PIBS and the PSI. These ranged from -.04 (p = .303) to -.46 (p = .000) and are reported in Table IV-10. The item with the lowest correlation was "I feel that there is a perfect solution to every problem I encounter with my child." The item with the highest correlation was "I have faith in my own ability to

Table IV-10

Pearson Product Moment Correlation Coefficients Between Individual PIBS Items and Parenting Stress

Item		Corr. / P
1.	I must always be a loving parent in order to gain the approval of my child.	-.18(.017)
2.	It is terrible when my child is not the way I would like him or her to be.	-.29(.000)
3.	I have no choice but to feel hurt when criticized as a parent.	-.26(.001)
4.	I constantly worry that some harm may come to my child.	-.34(.000)
5.	I feel I must deal with discipline problems when they happen.	-.09(.148)
6.	Whether I am a good or bad parent depends entirely on the way I was raised as a child.	-.19(.016)
7.	I get terribly upset when I see people treating their children differently than I would.	-.14(.052)
8.	I feel that there is only one right way to raise children.	-.09(.148)
9.	Parents must be loved by their children.	-.12(.076)
10.	If I am not a perfect parent then I am a failure.	-.18(.018)
11.	When I say things to my child which I don't really mean I feel that I am basically a bad person.	-.32(.000)
12.	I constantly worry that I will make a terrible mistake as a parent.	-.41(.000)
13.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	-.46(.000)
14.	I can learn from my experiences as a child and use them to become a better parent.	-.28(.001)
15.	I feel that there is a perfect solution to every problem I encounter with my child.	-.04(.303)
16.	When my child does something wrong I feel that I have failed as a parent.	-.34(.000)
17.	When I do something wrong as a parent which I feel is wrong it means that I am a bad person and should be punished.	-.24(.003)
18.	It is terrible when I can not give my child the things I would like to give.	-.41(.000)
19.	I feel that I have no choice but to feel angry when my child does something wrong.	-.36(.000)
20.	When I have a problem with my child I feel it is best to wait and see if it fixes itself.	-.11(.095)
21.	Whenever I have to make a decision concerning my child I ask someone for advise.	-.35(.000)
22.	I am constantly bothered by the problems other people have in raising children.	-.24(.002)

deal with most problems that I may encounter as a parent." Overall, items which related most highly to the PSI seem to center around the themes of "worry about ability to parent", "need for perfection as a parent", and "belief that individuals have little ability to control or change their feelings." Examples of these are "I constantly worry that I will make a terrible mistake as a parent" ($r = -.41$, $p = .000$), "When my child does something wrong I feel that I have failed as a parent" ($r = -.34$, $p = .000$) and "I feel that I have no choice but to feel angry when my child does something wrong" ($r = -.36$, $p = .000$). The majority of items which correlated most highly with parenting stress load on the first factor of the PIBS. Further light may be shed on the relationship between parenting stress and parent irrational beliefs by calculation of correlations between the PSI and the PIBS factor scores once the factor structure of the PIBS is confirmed.

Differences Between Subgroups

Multivariate analysis of variance was used to determine whether there were any significant overall differences on any of the measures used between subgroups differing on demographic variables such as parent age, marital status, employment status, income level, education level, number of children, and degree of spousal involvement. If significant overall differences were found, ANOVAs were used to determine more specifically where the differences lay in

terms of stress levels, irrational beliefs, and levels of efficacy. Scheffe tests were performed on any significant results to determine which groups differed at the .05 level.

There were no significant differences found on any scales between subgroups differing in marital status, education level, number of children, or degree of spousal support. Significant differences were found on the PIBS according to Mother's age ($F=4.90$, $p=.001$). Mothers in the 31 to 45 year age group scored significantly higher than did mothers in the 16 to 25 year age group. Significant differences were also found on the PIBS according to household income ($F=4.40$, $p=.002$). Subjects with a household income greater than 40 thousand dollars per year scored significantly higher on the PIBS than subjects in the 20-30 thousand dollar range. The only other significant difference found was on the Parent Accepts Child subscale of the PSI according to mother's employment status ($F=5.12$, $p=.007$). Women who work full time outside of the home scored significantly higher on the Parent Accepts Child subscale than did mothers who work part time outside of the home.

Chapter 5

Discussion

Validity of the Parent Irrational Belief Scale

Construct validity of the Parenting Irrational Belief Scale was supported by a moderately high degree of relationship to the general irrational belief scale, and a low degree of relationship to the Parent Sense of Competence Scale and Locus of Control Scale. However, the correlation between the PIBS and PSI Competence subscale was inconsistent with these findings. The correlation between the PIBS and Competence subscale of the PSI was significantly higher than the correlation between the PIBS and the PSOC and IE. While the PSOC and Competence subscale of the PSI were viewed as measuring the same construct, it appears from the correlation between the two (-.34) that they may be measuring different constructs or different facets of the same construct. The PSOC has two major factors. The first, Satisfaction, is an affective dimension reflecting parenting frustration, anxiety, and motivation. The second, Efficacy, is an instrumental dimension reflecting competence, problem solving ability, and capability in the parenting role. Examination of the items on the Competence subscale of the PSI suggests that the subscale is similar to the Efficacy dimension on the PSOC. Calculation of correlation coefficients between the PSOC factors and the PIBS and PSI Competence subscale may shed more light on this issue. It may be that the PIBS is

related to one factor on the PSOC and not to the other.

The general irrational belief scale, the RBI, showed the same pattern of correlations with the PSOC (.05), the IE (.18) and the PSI Competence subscale (-.43) as the PIBS. It is possible that the evidence for discriminant validity based on the low correlations between the irrational belief scales and the PSOC is an artifact due to differences in scoring of the scales. The direction of scoring on the PIBS and RBI is such that a score of 1 indicates strong agreement, while a score of 1 on the PSOC indicates strong disagreement. Thus, response bias could be contributing to the low correlation between the PIBS and the PSOC, and correspondingly to the high correlation between the PIBS and the RBI. Further study using the PIBS with a reversed scale such that a high score indicates strong agreement and a low score indicates strong disagreement would determine whether the correlations between the measures of irrational beliefs and measures of parent sense of competence are in fact artifactual.

Zurawski and Smith (1987) have suggested that existing irrational belief scales are simply measures of general distress, rather than valid measures of irrational beliefs. They have criticized existing scales on the basis that they lack discriminative validity. Smith and Allred (1986) suggest that poor discriminative validity may be due to affective contamination of the scales such that they tap

feeling of distress rather than beliefs. Results of the study suggest that the PIBS and the PSI, while related, are not measuring the same construct. However, the results of the principal component analyis suggest that the first factor on the PIBS, which accounted for 27.6 percent of the variance, may be an affective scale. In addition, the second highest correlation between the PIBS and the PSI subscales was with Parent Depression (-.47) which measures feelings of unhappiness and guilt. It may be that irrational beliefs have a cognitive component and an affective component that are not completely separable. Many of the items on the PIBS are worded in terms of behavioral and affective responses such that the item not only taps the belief but also the affect (ie. worry or hurt) that the belief is hypothesized to produce. Individual items which correlated significantly with stress loaded on the first factor suggesting that it may be the affective component rather than the cognitive component which is most highly related to stress. Once the factor structure of the PIBS is confirmed, calculation of correlations between the separate factors and the PSI and PSI subscales may shed more light on the matter. Calculation of correlation coefficients between the PSI and RBI factors may also be helpful in exploring this issue.

The factor structure of the PIBS was examined and revealed 6 dimensions of parent irrational beliefs. The

first factor, WORRY, reflects the parent's degree of anxiety over their ability to parent and to determine the fate of their children. Items which are representative of this factor are "I constantly worry that I will make a terrible mistake as a parent" and "I constantly worry that some harm may come to my child." These two items were developed from Ellis' irrational belief that if something seems strange or fearsome, you must preoccupy yourself with and make yourself anxious about it. Two other items which loaded on this factor relect an inability to make choices about how one feels. The items are "I feel that I have no choice but to feel angry when my child does something wrong" and I have no choice but to feel hurt when criticized as a parent." These items were developed from Ellis' original irrational idea that emotional misery comes from external pressures and one has little ability to control or change their feelings.

The second factor, RIGIDITY, reflects a rigid thinking style characterized by the beliefs that there are perfect solutions to problems and there is only one right way to raise children. Rather than being specifically related to one of Ellis' beliefs, it seems to be reflective of an overall thinking style.

The third and fourth factors tap into two types of need for perfection as a parent and are similar to Ellis' original idea that one must prove thoroughly competent, adequate, and achieving in order to be a worthwhile person.

The third factor, SECURE NEED FOR PERFECTION, includes the individuals belief in their ability to handle most problems encountered as a parent. The fourth factor, INSECURE NEED FOR PERFECTION, is characterized by a need to seek advice and direction in parenting.

The fifth factor, INDECISION, is characterized by indecision in regards to parenting and a need to constantly seek advice. It seems to be most related to Ellis' original idea that one should be dependent on others and needs someone stronger than oneself on whom to rely. The final factor, TENDENCY TO CATASTROPHIZE, is similar to factor 2 in that it seems to reflect a thinking style. It is characterized by a tendency to overreact to difficulties and upset oneself needlessly. A representative item from this factor is "I get terribly upset when I see people treating their children differently than I would."

Parent Irrational Beliefs

Subjects' scores on the PIBS showed considerable variation on level of irrational belief. Several beliefs specific to parenting were endorsed more than others. These centered around the themes of giving and receiving love in order to gain approval, criticism as a parent, and worry about harm coming to their children. On the more rational end, the majority of subjects (80 percent or greater) did not seem to feel a need for perfection as a parent. Overall, subjects seem to be more irrational in the areas of

need for love and approval and more reasonable in their expectations of competence and success.

Levels of Maternal Stress and Contributing Factors

Results indicated that women in the sample are fairly well adjusted parents overall but are experiencing stress associated with parenting. Forty seven percent of the subjects indicated that they find being a parent very stressful and 55% reported that since becoming a parent their lives are more stressed. One of the areas that subjects found particularly stressful was related to restrictions imposed by the parenting role. Thus, while 92% of the women reported that they enjoyed being a parent, 26% also felt that most of their lives were spent doing things for their children and 43% reported feeling that they were giving up more of their lives to meet their children's needs than they expected. Forty-one percent of the women felt that their children's needs controlled their lives and 70% felt that since having a child they were almost never able to do the things that they liked to do.

The stress that mothers experience seems to be more related to parent characteristics than child characteristics, although both of these dimensions contribute to overall parenting stress. Mothers who are feeling depressed, physically unwell, unsure of their parenting skills, and socially isolated or lacking in support from their spouses, report more stress than mothers

who feel well, confident about their parenting skills, and have adequate support from friends and relatives. Higher stress was also reported by women who perceived their children as overactive, overly demanding of their attention, overreactive to changes in routine, and difficult to calm down once upset. It is not possible to determine from the present study whether women who are feeling unwell, insecure, and isolated perceive their children as more negative or are feeling these things as a result of struggling with difficult children. Because the results indicate that parent characteristics are more related to parenting stress, it is suggested that women who feel well, competent, and supported will experience less stress even when dealing with difficult children.

Relationship Between Irrational Beliefs and Parenting Stress

Significant correlations were found between the Parenting Irrational Belief Scale, the Rational Behavior Inventory, the Parenting Stress Index and reported stress. The results suggest that well adapted, unstressed mothers tend to hold fewer irrational beliefs than mothers who are feeling stressed. It was consistently found that parent characteristics were more highly related to irrational beliefs than child characteristics. The Rational Behavior Inventory demonstrated the highest degree of relationship to parenting stress. However, the PIBS and RBI seem to be related to parent stress in slightly different ways. Parent

irrational beliefs seem to be more strongly related to stresses associated with parent sense of competence. The RBI which measures general irrational beliefs is more strongly related to stresses associated with restrictions imposed by the parental role. Another difference in relationship to the Parenting Stress Index is that parent irrational beliefs are more highly related to stresses associated with child hyperactivity, while general irrational beliefs are more highly related to child demandingness. Both irrational belief scales were found to have a high degree of relationship to the Parent Depression scale of the Parenting Stress Index.

Overall, the results suggest that women who feel more stressed have high expectations of themselves as parents, high expectations of their children with regards to love and approval, are sensitive to criticism of their parenting, and worry often about the welfare of their children. Needing approval, and at the same time needing to do everything "right", may create a dilemma for women which causes them anxiety and stress. As Ellis (1963) points out, it is irrational or unrealistic to expect to have approval from all people and to be perfect at all times.

It can not be concluded from the present study that parent irrational beliefs cause higher levels of parent stress; only that there is a positive relationship between parent irrational beliefs and parent stress. One

alternative hypothesis is that high levels of stress may constrict thinking such that high levels of stress cause individuals to think in a more irrational, or rigid manner. Irrational beliefs is only one factor which has been explored for its mediating role in stress. Future studies may want to explore other variables such as parental I.Q. which may be related to stress level and irrational beliefs.

Differences Between Subgroups

There were no significant differences found in overall stress levels, as measured by the PSI, between groups of mothers differing on the variables of age, marital status, employment status, income level, education level, and number of children. Rather than being a true reflection of whether these variables affect stress levels for mothers, the findings may be a result of small subject numbers in some catagories of certain variables investigated. The variables which did have relatively equal numbers in each catagory were parent age, employment status, and income. As such, it may be that overall parenting stress levels are not affected by these factors. The only significant difference found on any subscale of the PSI was on the Parent Accepts Child by mother's employment status. Mothers who work full time ouside of the home scored significantly higher on this subscale than mothers who work part time outside of the home, but not significantly different from mothers who are full time homemakers. According to the PSI manual these

results suggest that mothers who work full time are more likely than mothers who work part time to view their children as less attractive, intelligent, or pleasant than they had expected or hoped. It may be that mothers who work part time are able to be more accepting of their children because they have some balance in time spent with them and time spent away from them. Women who work full time may view their children less positively because they are tired at the end of a working day and have less time to deal with the demands of parenting. Further study is needed using relatively equal groups of subjects in each of the variable catagories in order to determine whether parent age, marital status, employment status, income, education level, and number of children, do in fact affect stress levels.

Significant differences were found on the PIBS according to mother's age and household income. Mothers in the 31 to 45 year old age range scored significantly higher on the PIBS than did mothers in the 16 to 25 year old range indicating that younger mothers hold more parenting irrational beliefs than older mothers. It may be that younger, less experienced mothers have higher expectations of themselves as parents and that these expectations mellow with time and experience. Further study comparing older and younger first time mothers may shed more light on whether age is a factor in level of parenting irrational belief.

Mothers with a household income of greater than 40

thousand dollars per year scored significantly higher on the PIBS than mothers with a household income of 20-30 thousand a year, indicating that women in the higher income bracket hold fewer parenting irrational beliefs than women in the lower income bracket. It may be that rather than income being a factor in determining levels of parent irrational beliefs other factors, such as eduction level, which influence income, may be involved. While no significant differences were found on the PIBS according to education level, as with stress, results may have been affected by unequal numbers in the catagories of education level.

The fact that younger and less affluent mothers scored lower on the PIBS (more irrational) suggests that the relationship between the PIBS and other measures may be confounded by age and social class. Future studies on the PIBS need to be sensitive to this issue which may be addressed through the use of partial correlations or some other statistical controls.

The following final chapter presents a brief summary of the study, conclusions, and implications for further research.

Chapter 6

Summary, Conclusions and Implications For Further Research

Summary and Conclusions

The purposes of this project were to develop an instrument to measure parent irrational beliefs and explore the relationship between irrational ideation of parents and parenting stress. The PIBS, a measure of general irrational beliefs (RBI), two measures of parent sense of efficacy (PSOC and IE) and a measure of parenting stress (PSI) were administered to 129 women with children under the age of three.

Results of the study indicate that the 22 item PIBS has acceptable internal reliability (Cronbach's alpha =.85). Construct and discriminant validity of the PIBS were supported by a significant correlation with a measure of general irrational beliefs (.69) and nonsignificant correlations with the measures of parent sense of efficacy (.11 and .10). However, findings of a correlation of -.48 between the PIBS and PSI Competence Subscale suggest a need for further study on the discriminant valididty of the PIBS. Preliminary analysis of the factor structure of the PIBS resulted in 6 factors: Worry, Rigidity, Secure Need for Perfection, Insecure Need for Perfection, Indecision, and Tendency to Catastrophize. The first factor, which accounted for the majority of variance in the scale seems to be an affective scale.

With regard to the relationship between parent

irrational beliefs and parenting stress, a significant correlation (-.47) was found between the PIBS and the PSI. Parent irrational beliefs which were found to have the most significant relationship to parent stress centered around worry about possible misfortune, need for perfection as a parent and belief that individuals have little ability to control or change their feelings.

Use of the PIBS in identifying parent irrational beliefs related to parent stress was supported by a moderate correlation with the Parenting Stress Index. While the general irrational belief scale correlated as highly with parent stress as did the PIBS, the PIBS may have more practical and clinical value in identifying specific beliefs related to parent stress. Using the PIBS, interventions can be aimed at modifying those parent irrational beliefs which are most highly related to parent stress. In addition, the PIBS is shorter than existing general irrational belief scales and takes little time to administer and score.

Implications For Further Research

Further research is needed in order for the PIBS to be a useful clinical scale. Preliminary norms for the PIBS have been established for women with children under the age of three. In order for the PIBS to be widely used its validity for varying age groups needs to be explored and norms for parents of children of varying ages need to be established. In addition, it would be useful to compare

irrational beliefs held by mothers and fathers and to establish norms for men as well as women.

The factor structure of the PIBS needs to be confirmed and norms calculated based on the factor scores. Further research exploring the relationship between the PIBS factors and parenting stress would also be useful in understanding the relationship between irrational beliefs and stress.

As demonstrating the validity of an instrument involves the gradual accumulation of information from a variety of sources over time, further study using the PIBS with varying populations of parents will add to its validity. Areas which might be useful to study are comparing irrational beliefs between abusing and non-abusing parents, and exploring the relationship between parent irrational beliefs and parenting styles.

The test-retest reliability of the PIBS was not explored in this study and needs to be examined. It would be important to determine whether individuals score consistently on the PIBS when it is readministered after varying lengths of time.

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APPENDIX A

Unrevised Parent Irrational Belief Scale
Item-total Correlations

Item		Correlation
I.	The idea that you must have love and approval from all people who are important to you.	
1.	I must always be a loving parent in order to gain the approval of my child.	.343
2.	Parents must be loved by their children.	.398
3.	It is not neccessary to be a perfect parent to gain the approval of my child.	.149*
II.	The idea that you must prove thoroughly competent, adequate and achieving to be a worthwhile person.	
4.	As a parent I feel it is o.k. to make occasional mistakes in raising my children.	.264*
5.	If I am not a perfect parent then I am a failure.	.420
6.	When my child does something wrong I feel that I have failed as a parent.	.454
III.	The idea that when people act obnoxiously and unfairly, you should blame them and damn them, and see them as bad, wicked or rotten.	
7.	When I make a mistake as a parent it does not make me a bad person.	.592*
8.	When I say things to my child which I don't really mean I feel that I am basically a bad person.	.660
9.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	.594
IV.	The idea that you have to view things as awful, terrible, horrible, and catastrophic when you get seriously frustrated or treated unfairly.	
10.	It is terrible when my child is not the way I would like him or her to be.	.583
11.	As a parent I feel that some things in life cannot be changed and therefore must simply be accepted.	-.274*
12.	It is terrible when I cannot give my child the things I would like to give.	.495
V.	The idea that emotional misery comes from external pressures and you have little ability to control or change your feelings.	
13.	I have no choice but to feel hurt when criticized as a parent.	.517

14.	When things don't go right with my child I can choose how I wish to react.	.511*
15.	I feel that I have no choice but to feel angry when my child does something wrong.	.653
VI.	The idea that if something seems strange or fearsome, you must preoccupy yourself with and make yourself anxious about it.	
16.	I constantly worry that some harm may come to my child.	.482
17.	I constantly worry that I will make a terrible mistake as a parent.	.440
18.	I seldom dwell on things that might happen to my child in the future.	.172*
VII.	The idea that you can more easily avoid facing life difficulties and responsibilities than undertake more rewarding forms of self discipline.	
19.	I feel that I must deal with discipline problems when they happen.	.442
20.	If I ignore problems with my child they will eventually go away.	.083*
21.	When I have a problem with my child I feel it is best to wait and see if it fixes itself.	.165
VIII.	The idea that one should be dependent on others and needs someone stronger than oneself on whom to rely.	
22.	I feel that I must have professional advice when dealing with problems as a parent.	.378*
23.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	.605
24.	Whenever I have to make a decision concerning my child I ask someone for advise.	.440
IX.	The idea that your past remains all important and that because something once strongly influenced your life, it has to keep determining your feeling today.	
25.	Whether I am a good or bad parent depends entirely on the way I was raised as a child.	.577
26.	I can learn from my experiences as a child and use them to become a better parent.	.411
27.	Everything I do to my child will affect him or her for the rest of his or her life.	.351*
X.	The idea that one should become quite upset over other peoples problems and disturbances.	
28.	I get terribly upset when I see people treating their children differently than I would.	.293
29.	There is no point being upset by the problems other people have with their children.	-.049*

30.	I am constantly bothered by the problems other people have in raising children.	.520
XI.	The idea that there is a right, precise and perfect solution to human problems and that it is catastrophic if this solution is not found.	
31.	I feel there is only one right way to raise children.	.425
32.	I feel that there is a perfect solution to every problem I encounter with my child.	.429
33.	I realize that there are no perfect solutions to the problems I face as a parent.	.424*

* Item from each group of three with lowest item-total correlation dropped to make up revised Parent Irrational Belief Scale.

APPENDIX B

University of Alberta
Edmonton
Canada T6G 2G5

Department of Educational Psychology
Faculty of Education
6-102 Education North, Telephone (403) 432-5245

Parent Stress and Beliefs Study

Dear Parent,

Dr. Calder of the University of Alberta is conducting a study dealing with the stress experienced by mothers of young children. The study involves having mothers with children under the age of three fill out a questionnaire about their levels of stress and some of their beliefs related to child rearing practices. Participation in the study is strictly **voluntary**. We would appreciate your cooperation in filling in the accompanying questionnaire. It should take you approximately 60 minutes to complete and can be completed at home and returned to Dr. Calder by mail. All postage is prepaid. Simply put the questionnaire in the accompanying envelope and drop it in the mail.

Please answer all questions and give your first response. This is a survey of attitudes and there are no right or wrong answers. There is no need to put your name anywhere on the questionnaire and all responses will be kept confidential. The data from the study will form the basis of my Ph.D. research and will contribute to the completion of my Doctorate in Educational Psychology.

We thank you for your help in assisting us with this project. If you have any questions concerning the study or the questionnaire please feel free to contact myself evenings, at 467-4481 or Dr. Calder daytime, at 432-3696.

Yours truly,

Kathleen A. Ackerman, M.Ed.
Department of Educational Psychology
University of Alberta

Dr. Peter Calder
Supervising Professor
Department of Educational Psychology
University of Alberta

ID ___(1)
ID ___(2)
ID ___(3)
R. NO. _1_(4)

PART 1

Please mark the degree to which you agree or disagree with the following statements by **circling** the number which clearly reflects your opinion. Do not use the spaces at the far right side of the page. Please work quickly and answer each question.

1 indicates a **strong agreement** with the statement
2 indicates that you **agree** with the statement but not strongly
3 indicates that you are **neutral**; that is, you neither agree nor disagree.
4 indicates a **disagreement** with the statement, but not a strong disagreement
5 indicates a **strong disagreement** with the statement.

1.	I must always be a loving parent in order to gain the approval of my child.	1 2 3 4 5	___(5)
2.	It is terrible when my child is not the way I would like him or her to be.	1 2 3 4 5	___(6)
3.	I have no choice but to feel hurt when critisized as a parent.	1 2 3 4 5	___(7)
4.	I constantly worry that some harm may come to my child.	1 2 3 4 5	___(8)
5.	I feel I must deal with discipline problems when they happen.	1 2 3 4 5	___(9)
6.	Whether I am a good or a bad parent depends entirely on the way I was raised as a child.	1 2 3 4 5	___(10)
7.	I get terribly upset when I see people treating their children differently than I would.	1 2 3 4 5	___(11)
8.	I feel that there is only one right way to raise children.	1 2 3 4 5	___(12)
9.	Parents must be loved by their children.	1 2 3 4 5	___(13)
10.	If I am not a perfect parent, then I am a failure.	1 2 3 4 5	___(14)
11.	When I say things to my child which I don't really mean I feel that I am basically a bad person.	1 2 3 4 5	___(15)
12.	I constantly worry that I will make a terrible mistake as a parent.	1 2 3 4 5	___(16)
13.	I have faith in my own ability to deal with most problems that I may encounter as a parent.	1 2 3 4 5	___(17)
14.	I can learn from my experiences as a child and use them to become a better parent.	1 2 3 4 5	___(18)
15.	I feel that there is a perfect solution to every problem I encounter with my child.	1 2 3 4 5	___(19)
16.	When my child does something wrong I feel that I have failed as a parent.	1 2 3 4 5	___(20)
17.	When I do something as a parent which I feel is wrong it means that I am a bad person and should be punished.	1 2 3 4 5	___(21)
18.	It is terrible when I cannot give my child the things I would like to give.	1 2 3 4 5	___(22)
19.	I feel that I have no choice but to feel angry when my child does something wrong.	1 2 3 4 5	___(23)
20.	When I have a problem with my child I feel it is best to wait and see if it fixes itself.	1 2 3 4 5	___(24)
21.	Whenever I have to make a decision concerning my child I ask someone for advise.	1 2 3 4 5	___(25)
22.	I am constantly bothered by the problems other people have in raising children.	1 2 3 4 5	___(26)

PART 2

For each of the following questions, please follow the scale and circle the number that most clearly reflects your opinion. Please work quickly and answer each question.

1 indicates a **strong agreement** with the statement
2 indicates that you **agree** with the statement but not strongly
3 indicates that you are **neutral**; that is, you neither agree nor disagree.
4 indicates a **disagreement** with the statement, but not a strong disagreement
5 indicates a **strong disagreement** with the statement.

1.	Helping others is the very basis of life.	1 2 3 4 5	(27)
2.	It is necessary to be especially friendly to new collegues and neighbors.	1 2 3 4 5	(28)
3.	People should observe moral laws more strictly than they do.	1 2 3 4 5	(29)
4.	I find it difficult to take criticism without feeling hurt.	1 2 3 4 5	(30)
5.	I often spend more time trying to think of ways of getting out of things than it would take me to do them.	1 2 3 4 5	(31)
6.	I tend to become terribly upset and miserable when things are not the way I would like them to be.	1 2 3 4 5	(32)
7.	It is impossible at any one time to change one's emotions.	1 2 3 4 5	(33)
8.	It is sinful to doubt the bible.	1 2 3 4 5	(34)
9.	Sympathy is the most beautiful human emotion.	1 2 3 4 5	(35)
10.	I shrink from facing a crisis or difficulty.	1 2 3 4 5	(36)
11.	I often get excited or upset when things go wrong.	1 2 3 4 5	(37)
12.	One should rebel against doing unpleasant things, however necessary, if doing them is unpleasant.	1 2 3 4 5	(38)
13.	I get upset when neighbors are very harsh with their little children.	1 2 3 4 5	(39)
14.	It is realistic to expect that there should be no incompatability in marriage.	1 2 3 4 5	(40)
15.	I frequently feel unhappy with my appearance.	1 2 3 4 5	(41)
16.	A person should be thoroughly competent, adequate, talented and intelligent in all possible respects.	1 2 3 4 5	(42)
17.	What others think of you is most important.	1 2 3 4 5	(43)
18.	Other people should make things easier for us, and help with life's difficulties.	1 2 3 4 5	(44)
19.	I tend to look to others for the kind of behavior they approve as right or wrong.	1 2 3 4 5	(45)
20.	I find that my occupation and social life tend to make me unhappy.	1 2 3 4 5	(46)
21.	I usually try to avoid doing chores which I dislike doing.	1 2 3 4 5	(47)
22.	Some of my family and/or friends have habits that bother and annoy me very much.	1 2 3 4 5	(48)
23.	I tend to worry about possible accidents and disasters.	1 2 3 4 5	(49)
24.	I like to bear responsibility alone.	1 2 3 4 5	(50)
25.	I get terribly upset and miserable when things are not the way I like them to be.	1 2 3 4 5	(51)
26.	I worry quite a bit over possible misfortunes.	1 2 3 4 5	(52)
27.	Punishing oneself for all errors will prevent future mistakes.	1 2 3 4 5	(53)
28.	One can best help others by criticizing them and sharply pointing out the error of their ways.	1 2 3 4 5	(54)
29.	Worrying about a possible danger will help ward it off or decrease its effects.	1 2 3 4 5	(55)
30.	I worry about little things.	1 2 3 4 5	(56)
31.	Certain people are bad, wicked, or villainous and should be severly blamed and punished for their sins.	1 2 3 4 5	(57)
32.	A very large number of people are guilty of bad sexual conduct.	1 2 3 4 5	(58)

33.	One should blame oneself severely for all mistakes and wrongdoings.	1 2 3 4 5	___(59)
34.	It makes me very uncomfortable to be different.	1 2 3 4 5	___(60)
35.	I worry over possible misfortunes.	1 2 3 4 5	___(61)
36.	I prefer to be independent of others in making decisions.	1 2 3 4 5	___(62)
37.	Because a certain thing once strongly affected one's life, it should indefinitely affect it.	1 2 3 4 5	___(63)

PART 3

Listed below are a number of statements. Please indicate your degree of agreement or disagreement with each item using the scale below. **Please note** that this scale is **different** than the previous ones.

6 indicates a **strong agreement** with the statement
5 indicates that you **agree** with the statement.
4 indicates that you **mildly agree** with the statement.
3 indicates that you **mildly disagree** with the statement.
2 indicates that you **disagree** with the statement.
1 indicates a **strong disagreement** with the statement.

1.	The problems of taking care of your child are easy to solve once you know how your actions affect your child, an understanding I have aquired.	1 2 3 4 5 6	___(64)
2.	Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age.	1 2 3 4 5 6	___(65)
3.	I go to bed the same way I wake up in the morining---feeling I have not accomplished a whole lot.	1 2 3 4 5 6	___(66)
4.	I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.	1 2 3 4 5 6	___(67)
5.	My mother was better prepared to be a good mother than I am.	1 2 3 4 5 6	___(68)
6.	I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good parent.	1 2 3 4 5 6	___(69)
7.	Being a parent is manageable, and any problems are easily solved.	1 2 3 4 5 6	___(70)
8.	A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.	1 2 3 4 5 6	___(71)
9.	Sometimes I feel like I'm, not getting anything done.	1 2 3 4 5 6	___(72)
10.	I meet my own personal expectations for expertise in caring for my child.	1 2 3 4 5 6	___(73)
11.	If anyone can find the answer to what is troubling my child, I am the one.	1 2 3 4 5 6	___(74)
12.	My talents and interests are in other areas, not in being a parent.	1 2 3 4 5 6	___(75)
13.	Considering how long I have been a mother, I feel thoroughly familiar with this role.	1 2 3 4 5 6	___(76)
14.	If being a mother of a child were only more interesting, I would be motivated to do a better job as a parent.	1 2 3 4 5 6	___(77)
15.	I honestly believe I have all the skills necessary to be a good mother to my child.	1 2 3 4 5 6	___(78)
16.	Being a parent makes me tense and anxious.	1 2 3 4 5 6	___(79)
17.	Being a good mother is a reward in itself.	1 2 3 4 5 6	___(80)

Please do not write in the following four spaces

ID	___(1)
ID	___(2)
ID	___(3)
R. NO.	_2_(4)

PART 4

This is a questionnaire to find out the way which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered **a** or **b**. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you are concerned by circling either **a** or **b**. Be sure to select the one you actually believe to be more true, rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief: there are no right or wrong answers

1. a. Children get into trouble because their parents punish them too much. — a b
   b. The trouble with most children nowadays is that their parents are too easy with them.

2. a. Many of the unhappy things in peoples lives are partly due to bad luck. — a b ___(5)
   b. Peoples misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in politics. — a b ___(6)
   b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world. — a b ___(7)
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard she tries.

5. a. The idea that teachers are unfair to students is nonsense. — a b ___(8)
   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader. — a b ___(9)
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. a. No matter how hard you try some people just don't like you. — a b ___(10)
   b. People who can't get others to like them don't understand how to get along with others.

8. a. Heredity plays the major role in determining one's personality. — a b
   b. It is one's experiences in life which determine what they're like.

9. a. I have often found that what is going to happen will happen. — a b ___(11)
   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of a well prepared student there is rarely if ever such a thing as an unfair test. — a b ___(12)
    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. a. Becomming a success is a matter of hard work, luck has little or nothing to do with it. — a b ___(13)
    b. Getting a good job depends mainly on being in the right place at the right time.

12. a. The average citizen can have an influence in government decisions. — a b ___(14)
    b. This world is run by the few people in power, and there is not much the little guy can do about it.

13. a. When I make plans, I am almost certain that I can make them work. — a b ___(15)
    b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. a. There are certain people who are just no good. a b
b. There is some good in everybody.

15. a. In my case getting what I want has little or nothing to do with luck. a b ___(16)
b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first. a b ___(17)
b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control. a b ___(18)
b. By taking an active part in political and social affairs the people can control world events.

18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings. a b ___(19)
b. There is really no such thing as "luck."

19. a. One should always be willing to admit mistakes. a b
b. It is usually best to cover up one's mistakes.

20. a. It is hard to know whether or not a person really likes you. a b ___(20)
b. How many friends you have depends on how nice a person you are.

21. a. In the long run the bad things that happen to us are balanced by the good ones. a b ___(21)
b. Most misfortunes are the result of lack of ability, ignorance, laziness or all three.

22. a. With enough effort we can wipe out political corruption. a b ___(22)
b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give. a b ___(23)
b. There is a direct connection between how hard I study and the grades I get.

24. a. A good leader expects people to decide for themselves what they should do. a b
b. A good leader makes it clear to everybody what their jobs are.

25. a. Many times I feel that I have little influence over the things that happen to me. a b ___(24)
b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly. a b ___(25)
b. There's not much use in trying too hard to please people, if they like you, they like you.

27. a. There is too much emphasis on athletics in high school. a b
b. Team sports are an excellent way to build character.

28. a. What happens to me is my own doing. a b ___(26)
b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do. a b ___(27)
b. In the long run the people are responsible for bad government on a national as well as local level.

PART 5

Parenting Stress Index

Items 1 to 101

102. I find being a parent very stressfull

103. Since becoming a parent my life has been more stressed.

PART 6

1. Please indicate the number of children that you have. 1 2 3 4 5 (55)
2. The age of the child which I answered the questionnaire about is:
   1. 0-6 months old
   2. 7-12 months old
   3. 13-24 months old
   4. 25-36 months old

   1 2 3 4 5 (56)
3. The child which I answered the questionnaire about is:
   1. A female
   2. A male

   1 2 3 4 5 (57)
4. The child which I answered the questionnaire about is:
   1. An only child
   2. The oldest child in the family
   3. A middle child in the family
   4. The youngest child in the family

   1 2 3 4 5 (58)
5. Please choose the number which corresponds with your marital status.
   1. Single
   2. Married
   3. Divorced or separated
   4. Living commonlaw

   1 2 3 4 5 (59)
6. Please choose the number which corresponds with your work status.
   1. Working full time in the home.
   2. Working full time outside of the home.
   3. Working part time outside of the home.

   1 2 3 4 5 (60)
7. Please indicate the number which corresponds with your age range.
   1. 16-20 years.
   2. 21-25 years.
   3. 26-30 years.
   4. 31-35 years.
   5. 36-45 years.

   1 2 3 4 5 (61)
8. Please indicate the number which corresponds with your average yearly household income.
   1. Less than 15 thousand
   2. 15-20 thousand
   3. 20-30 thousand
   4. 30-40 thousand.
   5. More than 40 thousand.

   1 2 3 4 5 (62)
9. Please indicate how involved your spouse is in raising the children.
   1. Very involved. As much as I am.
   2. Quite involved. Not as much as I am.
   3. Not very involved. Doesn't take much interest.
   4. Not involved at all.

   1 2 3 4 5 (63)
10. Would you be interested in attending a parenting stress group if one were available?
    1. Yes.
    2. No.

    1 2 3 4 5 (64)